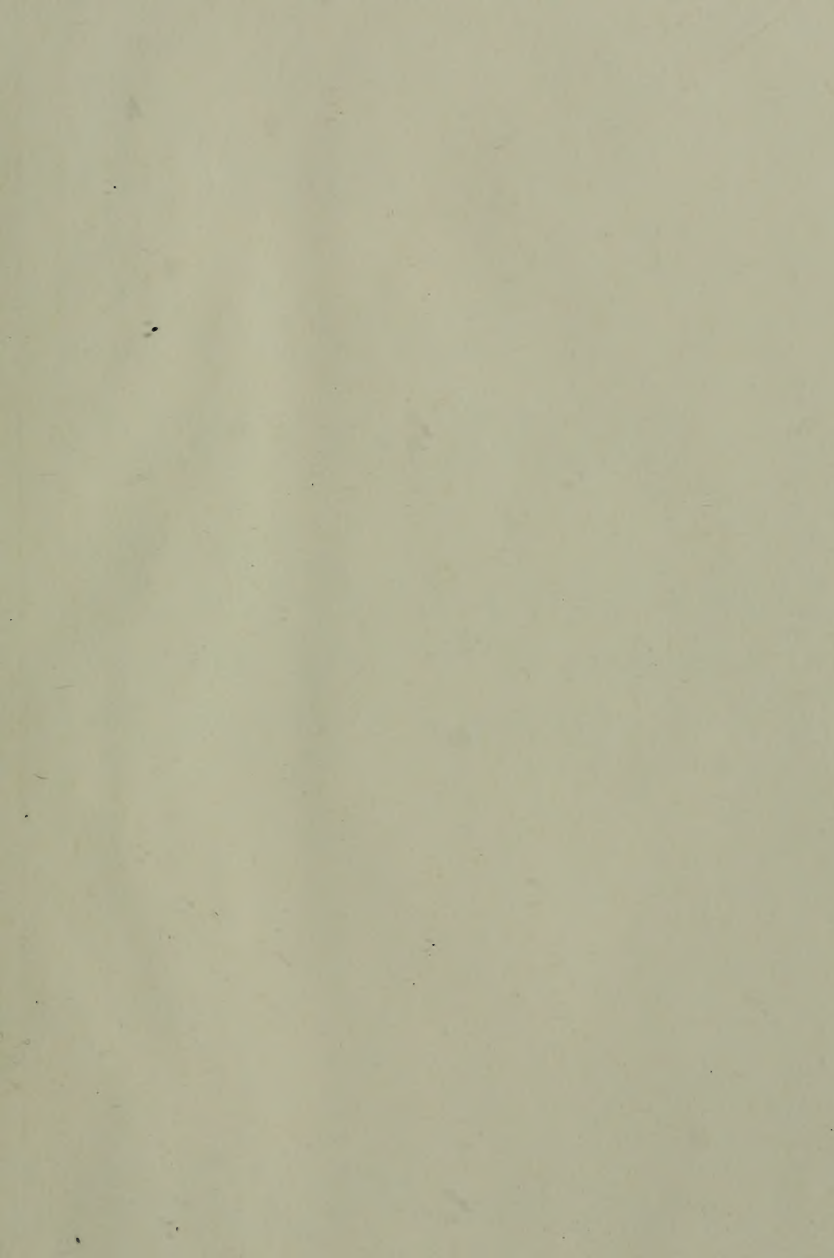




The Bulletin of Zoological Nomenclature

*[ICZN] The Official Periodical
of the International Commission
on Zoological Nomenclature*

Volume 49, 1992

Published on behalf of the Commission by
The International Trust for Zoological Nomenclature
c/o The Natural History Museum
Cromwell Road
London, SW7 5BD, U.K.

ISSN 0007-5167

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The Bulletin of Zoological Nomenclature



*ICZN The Official Periodical
of the International Commission
on Zoological Nomenclature*



THE BULLETIN OF ZOOLOGICAL NOMENCLATURE

The *Bulletin* is published four times a year for the International Commission on Zoological Nomenclature by the International Trust for Zoological Nomenclature, a charity (no. 211944) registered in England. The annual subscription for 1992 is £75 or \$145, postage included. All manuscripts, letters and orders should be sent to:

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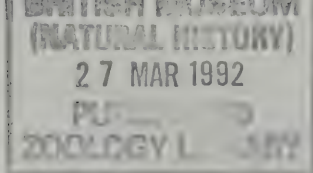
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BULLETIN OF ZOOLOGICAL NOMENCLATURE

Volume 49, part 1 (pp. 1–100)

26 March 1992

Notices

(a) *Invitation to comment.* The Commission is authorised to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after their publication, but this period is normally extended to enable comments to be submitted. Any zoologist who wishes to comment on any of the applications is invited to send his contribution to the Executive Secretary of the Commission as quickly as possible.

(b) *Invitation to contribute general articles.* At present the *Bulletin* comprises mainly applications concerning names of particular animals or groups of animals, resulting comments and the Commission's eventual rulings (Opinions).

Articles or notes of a more general nature are actively welcomed provided that they raise nomenclatural issues, although they may well deal with taxonomic matters for illustrative purposes. It should be the aim of such contributions to interest an audience wider than some small group of specialists.

(c) *Receipt of new applications.* The following new applications have been received since going to press for volume 48, part 4 (published on 19 December 1991). Under Article 80 of the Code, existing usage is to be maintained until the ruling of the Commission is published.

- (1) *Gebia major capensis* Krauss, 1843 (currently *Upogebia capensis*; Crustacea, Decapoda): proposed designation of a replacement neotype. (Case 2827). N. Ngoc-Ho & G.C.B. Poore.
- (2) *Tortaxis* Pilsbry, 1906 (Mollusca, Gastropoda): proposed designation of *Spiraxis mandarina* Pfeiffer, 1855 as the type species. (Case 2833). F. Naggs.
- (3) *Mugil curema* Valenciennes in Cuvier & Valenciennes, 1836 (Osteichthyes, Perciformes): proposed conservation of the specific name. (Case 2834). L. Alvarez-Lajonchere, E. Trewavas & G.J. Howes.
- (4) *Alestes* Müller & Troschel, 1844 (Osteichthyes, Characiformes): proposed conservation. (Case 2835). J. Géry & V. Mahnert.
- (5) *Pleurobranchus testudinarius* Cantraine, 1835 (Mollusca, Gastropoda): proposed conservation of the specific name. (Case 2838). W.B. Rudman.
- (6) *Wadicosa* Zyuzin, 1985 (Arachnida, Araneae): proposed designation of *Wadicosa conmoventa* Zyuzin, 1985 as the type species. (Case 2839). A.A. Zyuzin.
- (7) *Coelurus bauri* Cope, 1887 (currently *Coelophysis bauri*; Reptilia, Saurischia): proposed replacement of the lectotype by a neotype. (Case 2840). E.H. Colbert, A.J. Charig, P. Dodson, D.D. Gillette, J.H. Ostrom & D. Weishampel.

(d) *Rulings of the Commission.* Each Opinion, Declaration or Direction published in the *Bulletin* constitutes an official ruling of the International Commission on

Zoological Nomenclature, by virtue of the votes recorded, and comes into force on the day of publication of the *Bulletin*.

The International Commission on Zoological Nomenclature and its publications

The International Commission on Zoological Nomenclature was established in 1895 by the Third International Congress of Zoology, and at present consists of 29 zoologists from 19 countries whose interests cover most of the principal divisions (including palaeontology) of the animal kingdom. The Commission is under the auspices of the International Union of Biological Sciences (IUBS), and members are elected by zoologists attending General Assemblies of IUBS or Congresses of its associated bodies. Casual vacancies may be filled between Congresses. Nominations for membership may be sent to the Commission Secretariat at any time.

The International Code of Zoological Nomenclature has one fundamental aim, which is to provide 'the maximum universality and continuity in the scientific names of animals compatible with the freedom of scientists to classify all animals according to taxonomic judgements'. The latest (Third) Edition was published in 1985 by the International Trust for Zoological Nomenclature, acting on behalf of the Commission. Suggested amendments to the *Code* should be sent to the Secretariat.

Observance of the rules in the *Code* enables a biologist to arrive at the valid name for any animal taxon between and including the ranks of subspecies and superfamily. Its provisions can be waived or modified in their application to a particular case when strict adherence would cause confusion; however, this must never be done by an individual but only by the Commission, acting on behalf of all zoologists. The Commission takes such action in response to proposals submitted to it; applications should follow the instructions on the inside back cover of the *Bulletin*, and assistance will be given by the Secretariat.

The Bulletin of Zoological Nomenclature is published four times each year. It contains applications for Commission action, as described above; their publication is an invitation for any person to contribute comments or counter-suggestions, which may also be published. The Commission makes a ruling (called an Opinion) on a case only after a suitable period for comments. All Opinions are published in the *Bulletin*, which also contains articles and notes relevant to zoological nomenclature; such contributions may be sent to the Secretariat.

The Commission's rulings are summarised in *The Official Lists and Indexes of Names and Works in Zoology*; a single volume covering the period 1895–1985 was published in 1987, and a free supplement covering 1986–1990 was issued in 1991. Copies may be obtained from the Secretariat.

In addition to dealing with applications and other formal matters, the Commission's Secretariat is willing to help with advice on any question which may have nomenclatural (as distinct from purely taxonomic) implications.

The International Trust for Zoological Nomenclature is a charity (non-profit making company) registered in the U.K. The Secretariat of the Commission is at present based in London, and the Trust is established there for legal reasons to handle the financial affairs of the Commission. The sale of publications (*Code*, *Bulletin* and *Official*

Lists and Indexes) covers less than half of the costs of the service given to zoology by the Commission. Support is given by academies, research councils, associations and societies from a number of countries, and also by individuals, but despite this assistance the level of income remains a severe restraint and donations to the Trust are gratefully received.

For a more detailed discussion of the Commission and its activities see BZN 48: 295–299 (December 1991).

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Official Lists and Indexes of Names and Works in Zoology — Second Supplement to 1990

The Official Lists and Indexes of Names and Works in Zoology was published in 1987. This book gives details of all the names and works on which the Commission has ruled since it was set up in 1895, up to 1985. There are about 9,900 entries.

In the five years 1986–1990, 946 names and five works have been added to the Official Lists and Official Indexes. A supplement has been prepared giving these additional entries, together with some amendments and updatings to entries in the 1987 volume. Copies can be obtained without charge from either of the following addresses, from which the *Official Lists and Indexes* can also be ordered at the price shown (postage included). Payment should accompany orders.

The International Trust for Zoological Nomenclature, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. Price £60 or \$110

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The International Code of Zoological Nomenclature

The Third Edition (published 1985) supersedes all earlier versions and incorporates many changes.

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Bulletin of Zoological Nomenclature — Back Copies

Back copies of all the volumes of the *Bulletin*, and of most volumes of the *Opinions and Declarations* that were published concurrently with vols. 1–16 of the *Bulletin*, are still available. Prices on application to I.T.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K.

Bulletin of Zoological Nomenclature — Crustacea and Mollusca Offprints

The subscription rate for the *Bulletin* (Vol. 49 for 1992) is £75 or \$145. However, the Trust is offering a subscription for individual zoologists wishing to receive offprints of all cases in particular disciplines. For an annual payment of £15 or \$25 subscribers will receive copies of all Applications, Comments and Opinions relating to either the Crustacea or the Mollusca as soon as they are published in the *Bulletin of Zoological Nomenclature*. Offprints are available back to 1980.

Orders for offprints relating to either the Crustacea or the Mollusca should be sent to I.T.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K., with payment at the rate of £15 or \$25 for each year requested.

Case 2251

***Bucephalus* Baer, 1827 and *B. polymorphus* Baer, 1827 (Trematoda): proposed conservation in their accepted usage**

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Abstract. The purpose of this application is to conserve in their accepted usage the generic and specific names of an important trematode parasite of freshwater fishes — *Bucephalus polymorphus* Baer, 1827. The name *B. polymorphus* was based on cercariae, but it has been shown that these develop into the adult trematode first named as *Rhipidocotyle campanula* (Dujardin, 1844), a senior synonym of *R. illensis* (Ziegler, 1883). A neotype for *B. polymorphus* is proposed to avoid transfer of this long recognized name to *R. campanula*, with resulting confusion at both generic and specific levels.

1. In European freshwater fishes two common species of trematodes of the family BUCEPHALIDAE, known as *Bucephalus polymorphus* Baer, 1827 and *Rhipidocotyle illensis* (Ziegler, 1883), have been recognized. It had been assumed that the adult form called *Bucephalus polymorphus* developed from the cercaria described under this name by Baer in 1827, but the cercaria of the trematode now known by that name was not described until recently, although it was figured by Kinkelin et al. (1968).

2. While studying the biology of these two species, both of which occur in Poland, I examined bivalves (the first intermediate host), cyprinid fishes (the second intermediate host) and predatory fishes (the definitive host). I found two different cercariae from which I experimentally obtained the metacercariae of two species, but the metacercariae of *Rhipidocotyle illensis* developed from cercariae identical with those described by Baer as *Bucephalus polymorphus*. Detailed data on the morphology of all developmental stages can be found in Baturó (1977).

3. As a result of this study it has become necessary to set in order the names of these two species of Trematoda. For stability of nomenclature it is necessary to maintain the

An application for the conservation of the nominal taxa *Bucephalus* and *B. polymorphus* was received from Dr Baturó on 27 February 1978. Extensive correspondence took place between her and the then Secretary of the Commission (Mr R.V. Melville), and a revised version of her application was published in July 1979 (BZN 36: 30–36). A comment opposing Dr Baturó's application was received from Dr C.B. Srivastava (*Zoological Survey of India*) on 5 January 1981. Further extensive correspondence took place, with efforts to reconcile points of difference between Dr Baturó and Dr Srivastava. This correspondence eventually lapsed without publication of Dr Srivastava's comment and without the Commission voting upon Dr Baturó's application. In view of its importance, the case has now been reopened. Dr Baturó's application is here reprinted with some modifications. A condensed version of Dr Srivastava's comment is published on BZN 49: 62–66, together with comments in support of Dr Baturó's application from Dr D.I. Gibson (*Parasitic Worms Division, The Natural History Museum, London*), Dr O.N. Pugachev (*Parasitic Worms Department, Zoological Institute, Academy of Sciences, St Petersburg*) and Professor J.C. Pearson (*Department of Helminthology, University of Queensland*).

name *Bucephalus polymorphus*, commonly used and accepted in all keys, textbooks and monographs. The other species, which belongs to the genus *Rhipidocotyle* Diesing, 1858 (p. 313), should under the Principle of Priority be called *R. campanula* (Dujardin, 1844), although it has been known by the junior subjective synonym *R. illensis* (Ziegler, 1883). The history of the case is as follows.

4. Baer (1827, p. 570) established the genus *Bucephalus* for the new species *B. polymorphus* (the type species by monotypy). He based the description on sporocysts and cercariae from the bivalves *Anodonta mutabilis* and *Unio pictorum*.

5. In 1844 Dujardin described from the intestine of the pike (*Esox lucius*) small adult trematodes which he thought represented the same species as metacercariae that he had earlier found on the branchia of *Cyprinus idus*. He classified them in the genus *Distoma* Retzius, 1786 and gave them the new specific name *campanula* (p. 435). Dujardin's description of the anterior organ suggests that he was dealing with the adult trematode usually known by the name *Rhipidocotyle illensis* (Ziegler, 1883).

6. Siebold (1848) gave the first short description of an adult trematode from the intestine of *Perca fluviatilis* and *Lucioperca* sp., and erected the new genus *Gasterostomum* for it with the new species *fimbriatum*. Siebold expressed the assumption that the cercaria described by Baer as *Bucephalus polymorphus* was a larva of this adult stage.

7. Wagener (1852, 1857, 1858) gave a more accurate description of *Gasterostomum fimbriatum*, together with drawings of the adult stages. He stated (1852) that *G. fimbriatum* was characterised by five tentacles on the anterior organ. In his next work (1857) he presented drawings and said that *G. fimbriatum* Siebold was probably a synonym of *Bucephalus polymorphus* Baer. A year later Wagener considered *G. fimbriatum* Siebold and *Distoma campanula* Dujardin to be synonyms of *B. polymorphus*. He regarded *G. fimbriatum* Siebold as a sexually mature and tail-less *B. polymorphus* Baer.

8. Ever since Wagener's papers, the view has been adopted that the adult trematode *G. fimbriatum* Siebold, characterised by the presence of long tentacles on the sucker, develops from the cercariae described in 1827 under the name *Bucephalus polymorphus*. Diesing questioned this view in 1858, but because of erroneous interpretations by this author in other matters his works have not been taken into account.

9. In 1883 Ziegler obtained metacercariae experimentally by infecting the cyprinid *Leuciscus erythrophthalmus* with *B. polymorphus* cercariae developed in the mussel *Anodonta mutabilis* from the Ille river. In describing and illustrating the material obtained, he pointed out the morphological differences between the specimens reared and *G. fimbriatum* Siebold, but he did not determine unequivocally the specific distinction of these two forms. He stipulated, however, that, in case the differences observed by him should prove to be specific differences, he proposed to call the reared form *Gasterostomum illense* (p. 542, footnote).

10. Lühe (1909) considered *G. fimbriatum* as a synonym of *B. polymorphus* Baer, but the description and drawing included in the key correspond to *illensis*. Similarly, Eckmann (1932) acknowledged the existence of only one species, recognising *G. fimbriatum* as a synonym of *B. polymorphus* and questioning whether the form obtained by Ziegler was a separate species. Eckmann (1932) also studied the type

specimens of *Gasterostomum galeatum* (Rudolphi, 1819) and *G. minimum* Wagener, 1852 and synonymized them, thereby making *G. galeatum* the valid name of the type species of *Rhipidocotyle* Diesing, 1858.

11. A return to the former concept of the occurrence of more than one species of BUCEPHALIDAE in European freshwater fishes dates from the work of Koval (1949), who recorded two species in the fishes of the Dnieper river. She described one of them as a new species, *Bucephalus markewitschi* (p. 206), and used the name *B. polymorphus* Baer for the second species, which corresponds with *G. illense* Ziegler.

12. This taxonomic arrangement was not accepted. Vejnar (1956), for example, asserting the existence of two species of trematodes in percid fishes, regarded the form with tentacles as *B. polymorphus* Baer and identified the other species with the forms described by Ziegler. He transferred this species to *Rhipidocotyle*, using the combination *Rhipidocotyle illense* [sic] (Ziegler, 1883). Vejnar's view was supported by Kozicka (1959), who included in her work the history of the study of one of these trematodes, together with detailed descriptions and drawings of adult worms of both species. Kozicka treated the name *B. markewitschi* Koval as a synonym of *B. polymorphus* Baer. The characters mentioned by Kozicka as differentiating the two taxonomic species have become key characters and are quoted in all recent monographs and keys (e.g. Skrjabin, 1962; Yamaguti, 1971; Bykhovskaja-Pavlovskaja et al., 1962; Ergens & Lom, 1970).

13. Dollfus (1968) discussed the problems of synonymy once again. Presenting the documentation of the manuscript of the chapter on trematodes from Dujardin's *L'Histoire naturelle des Helminthes*, he drew attention to the similarity of the drawing of *Distoma campanula* made by Dujardin to *Rhipidocotyle illensis* and proposed the combination *Rhipidocotyle campanula* (Dujardin, 1845) as the valid name for this species.

14. Kinkelin et al. (1968), in a study of the pathogenic effects of cercariae, presented photographs of three developmental stages. Cercariae from the bivalve *Dreissena polymorpha* differ from *B. polymorphus* cercariae from *Anodonta mutabilis* and *Unio pictorum* drawn by Baer. The metacercariae and adults are characterised by finger-like tentacles on the anterior sucker. Although the authors did not discuss this problem in their paper, thanks to their correct documentation the adult stage with finger-like tentacles on the anterior sucker ('*Bucephalus polymorphus*' auct.) was for the first time associated with its corresponding cercaria. My study (Batur, 1977) confirms that these are successive developmental stages of one species.

15. Thus, in accordance with the Principle of Priority, the species commonly known as *Rhipidocotyle illensis* (Ziegler, 1883), whose adult develops from cercariae described by Baer (1827), should bear the name *polymorphus* Baer, 1827, while the forgotten name *fimbriatum* Siebold, 1848, should be restored for the species widely known as *Bucephalus polymorphus* Baer, 1827. At the same time, it would be necessary to regard the generic name *Rhipidocotyle* Diesing, 1858, as a synonym of *Bucephalus* Baer, 1827, and to use the forgotten name *Gasterostomum* Siebold, 1848 for the genus known at present as *Bucephalus*.

16. The introduction of such changes in accordance with the Principle of Priority would conflict with current usage. The key characters of trematodes are based on the morphology of the adults and metacercariae, not on the cercariae. Likewise, most data in the literature concern these two developmental stages. Both species are common

parasites of fishes and are widely met as metacercariae and adults. For many practising parasitologists the cercariae from which the metacercariae and adults develop are often unknown — as witness the paper by Kinkelin et al. (1968) in which the authors, presenting adequate photographic documentation, did not observe the fact that they were dealing with unknown cercariae. Strict application of the Principle of Priority to the nomenclature of these common fish parasites would lead to much confusion and erroneous identification of material.

17. Through the co-operation of Dr G. Hartwich, syntypes of *G. fimbriatum* Siebold, 1848 have been found in the Zoological Museum, Humboldt University, Berlin. By designating one of these as the lectotype of *G. fimbriatum* (and in 1979 I designated microscopic preparation No. 1655b in the first printing of this paper in BZN 36: 33) and also as the neotype of *Bucephalus polymorphus* Baer, 1827, stability of nomenclature can be achieved. The latter action, however, can only be taken by the Commission under its plenary powers, because the proposed neotype is not 'consistent with what is known of the former name-bearing type' as is required under Article 75d(4) of the Code.

18. Before putting precise proposals to the Commission, it is desirable to clarify the status of the genus *Rhipidocotyle* Diesing, 1858. This was proposed by Diesing (1858, pp. 313, 361) with two included species, *Distoma gracilescens* Rudolphi, 1819 (pp. 111, 409) and *Gasterostomum minimum* Wagener, 1852 (p. 558), neither of which was designated as type species. According to Eckmann (1932, p. 99), Stiles & Hassall (1908, p. 358) were the first authors to cite a type species, and chose *gracilescens*. However, Stiles & Hassall only said '(type probably *gracilescens*)', and under Article 67c(3) that cannot be accepted as a valid designation. Nicoll (1914, p. 490) definitely designated *Gasterostomum minimum* Wagener, 1852 (p. 558), and that stands as the first valid type species designation for *Rhipidocotyle*. The valid name for this species is *Rhipidocotyle galeata* (Rudolphi, 1819, p. 86).

19. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to set aside all previous fixations of type specimen for the nominal species *Bucephalus polymorphus* Baer, 1827 and to designate microscopic preparation No. 1655b in the Zoological Museum, Humboldt University, Berlin, as neotype of that species;
- (2) to place on the Official List of Generic Names in Zoology the following names:
 - (a) *Bucephalus* Baer, 1827 (gender: masculine), type species by monotypy *Bucephalus polymorphus* Baer, 1827;
 - (b) *Rhipidocotyle* Diesing, 1858 (gender: feminine), type species by subsequent designation by Nicoll (1914) *Gasterostomum minimum* Wagener, 1852 (a junior subjective synonym of *Monostoma galeatum* Rudolphi, 1819);
- (3) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *polymorphus* Baer, 1827, as published in the binomen *Bucephalus polymorphus* (specific name of the type species of *Bucephalus* Baer, 1827) and as defined by the neotype designated in (1) above;
 - (b) *galeatum* Rudolphi, 1819, as published in the binomen *Monostoma galeatum* (senior subjective synonym of the specific name of the type species of *Rhipidocotyle* Diesing, 1858).
 - (c) *campanula* Dujardin, 1844, as published in the binomen *Distoma campanula*;

- (4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Gasterostomum* Siebold, 1848 (a junior objective synonym of *Bucephalus* Baer, 1827);
- (5) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *fimbriatum* Siebold, 1848, as published in the binomen *Gasterostomum fimbriatum* (a junior objective synonym of the specific name of *Bucephalus polymorphus* Baer, 1827).

Acknowledgements

I should like to express my gratitude to Miss G. Supel for her help in translating my work and to Docent Dr hab M. Mroczkowski for his advice in formulating my application.

References

- Baer, K.E. von. 1827. Beiträge zur Kenntniss der niedern Thiere. *Nova Acta Physico-Medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum*, **13**: 523–762.
- Baturo, B. 1977. *Bucephalus polymorphus* Baer, 1827 and *Rhipidocotyle illense* (Ziegler, 1883) (Trematoda, Bucephalidae): morphology and biology of developmental stages. *Acta Parasitologica Polonica*, **24**: 203–220.
- Bykhovskaja-Pavlovskaja, I.E., Gusev, A.V., Dubinina, M.N. & six others. 1962. [Key to parasites of freshwater fish of the U.S.S.R.] *Opredeliteli po Faune SSSR*, No. 80. 776 pp. Izdatel'stvo Akademii Nauk SSSR, Moscow & Leningrad. [In Russian.]
- Diesing, C.M. 1836. Monographie der Gattungen *Amphistoma* und *Diplodiscus*. *Annalen des Wiener Museums der Naturgeschichte*, **1**: 235–260.
- Diesing, C.M. 1850. *Systema Helminthum*, vol. 1. 679 pp. Braumüller, Vindobonae.
- Diesing, C.M. 1858. Revision der Myzhelminthen. Abtheilung: Trematoden. *Sitzungsberichte der Mathematisch-Naturwissenschaftlichen Classe der Kaiserlichen Akademie der Wissenschaften*, **32**: 307–390.
- Dollfus, R.P. 1968. Les trématodes de l'Histoire naturelle des Helminthes de Félix Dujardin (1845). *Mémoires du Muséum national d'Histoire naturelle*, (A)**54**: 117–196.
- Dujardin, F. 1844. *Histoire naturelle des helminthes ou vers intestinaux*. xvi, 654, 15 pp. Roret, Paris.
- Eckmann, F. 1932. Beiträge zur Kenntniss der Trematodenfamilie Bucephalidae. *Zeitschrift für Parasitenkunde*, **5**: 94–111.
- Ergens, R. & Lom, J. 1970. *Puvodci parazitarnich nemoci ryb*. 383 pp. Academia, Prague.
- Kinkelin, P. de, Tuffery, G., Leynaud, G. & Arrigton, J. 1968. Etude épizootiologique de la bucéphalose larvaire à *Bucephalus polymorphus* (Baer 1827) dans le peuplement piscicole du Bassin de la Seine. *Recherches Vétérinaires*, **1968**(1): 77–98.
- Koval, V.P. 1949. Novyj vid *Bucephalus* v rybak Dnepra. *Doklady Akademii Nauk SSSR*, **68**: 205–208. [In Russian.]
- Kozicka, J. 1959. Parasites of fishes of Druzno lake (Parasitofauna of the biocoenosis of Druzno lake — part viii). *Acta Parasitologica Polonica*, **7**: 1–72.
- Lühe, M. 1909. Parasitische Plattwürmer. I. Trematoden. *Die Süßwasserfauna Deutschlands* (Ed. A. Brauer), **17**: 1–217.
- Nicoll, W. 1914. The trematode parasites of fishes from the English Channel. *Journal of the Marine Biological Association of the U.K.*, (2)**10**: 466–505.
- Poche, F. 1907. Einige Bemerkungen zur Nomenclatur der Trematoden. *Zoologischer Anzeiger*, **31**: 124–126.
- Rudolphi, C.A. 1819. *Entozoorum synopsis, cui accedunt mantissa duplex et indices locupletissimi*. 810 pp. Berlin.
- Siebold, Th. C. 1848. *Lehrbuch der vergleichende Anatomie der wirbellosen Tiere*. xv, 679 pp. Berlin.

- Skrjabin, K.I.** 1962. Semejstvo Bucephalidae Poche, 1907. *Trematody zhivotnykh i cheloveka* (Ed. K.I. Skrjabin), Izd. A.N. SSSR, **20**: 183–551. Moscow & Leningrad. [In Russian.]
- Stiles, C.W. & Hassall, A.** 1908. *Index-catalogue of medical and veterinary zoology. Subjects: Trematoda and trematode diseases*. 398 pp. Washington, D.C.
- Vejnar, F.** 1956. Príspevek k helmintofaune našich okounovitých ryb. *Sborník Vysoké školy Zemedelské a Lesnické Fakulty v Brně*, (B)**25**: 161–176.
- Wagener, G.R.** 1852. Enthelminthica No. III. Ueber *Distoma dimorphum* Diesing. *Distoma marginatum* Rud. *Archiv für Anatomie, Physiologie und Wissenschaftliche Medizin*, **1852**: 555–569.
- Wagener, G.R.** 1857. Beiträge zur Entwicklungs-Geschichte der Eingeweidewürmer. *Natuurkundige Verhandeligen van der Hollandsche Maatschappij der Wetenschappen te Haarlem*, **13**: 1–112.
- Wagener, G.R.** 1858. Enthelminthica No. IV. Ueber *Distoma campanula* (*Gasterostoma fimbriatum* Siebold) Duj. und *Monostoma bipartitum* Wedl. *Archiv für Naturgeschichte*, **24**: 250–256.
- Yamaguti, S.** 1971. *Synopsis of digenetic trematodes of vertebrates*, vol. 1, 1074 pp.; vol. 2, 349 pls. Keigaku, Tokyo.
- Ziegler, H.E.** 1883. *Bucephalus* und *Gasterostomum*. *Zeitschrift für Wissenschaftliche Zoologie*, **39**: 537–571.

Case 2247***Balea* Gray, 1824 (Mollusca, Gastropoda): proposed conservation**

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Abstract. The purpose of this application is to conserve the name *Balea* Gray, 1824, currently in use for a genus of pulmonate gastropods of Europe, the Azores and the Canary Islands (family CLAUSILIIDAE Mörch, 1864, subfamily BALEINAE). The name has been placed on the Official List of Generic Names in Zoology (Opinion 335) but is threatened by the senior objective synonym *Strombiformis* Da Costa, 1778, for which suppression is proposed. During the last 70 years the name *Strombiformis* has been occasionally and invalidly used for a prosobranch genus, correctly named *Eulima* Risso, 1826 (family EULIMIDAE Philippi, 1853, which includes more than 4,000 species, world-wide, all parasitic on echinoderms).

1. Risso (1826, p. 123) proposed the generic name *Eulima* and included four nominal species, including (p. 123, pl. 4, fig. 39) *Helix subulatus* 'Brocchi, 1814', but he did not designate a type. Brocchi (1814, p. 305, pl. 3, figs. 5a, b) treated *subulatus* as though it were a new species but it is probable that he was referring to *Turbo subulatus* Donovan, 1804 (pl. 172, text), an unnecessary replacement name for *Strombiformis glaber* Da Costa, 1778 (p. 117). Brocchi's illustrated specimen of *subulatus*, from the Italian Neogene, was figured by Pinna & Spezia (1978, p. 141, pl. 26, figs. 4, 4a). I have examined Brocchi's specimens in the Museo Civico di Storia Naturale, Milan, and cannot distinguish them from the Recent species *S. glaber* Da Costa, 1778. Herrmannsen (1847 (April), p. 431) designated *Turbo subulatus* Donovan (i.e. *S. glaber*) as the type species of *Eulima*. Later designations of the nominal species *Turbo politus* Linnaeus, 1758 (p. 767) by Gray (1847 (November), p. 160) and by Bucquoy, Dautzenberg & Dollfus (1883, p. 188) as the type of *Eulima* are invalid; moreover, *politus* was not a species originally included in the genus. A search in several museums in the U.K. failed to reveal any type material of either *Strombiformis glaber* or *Turbo subulatus* Donovan, 1804 and I designated a specimen from south Devon (Norman collection) in the Natural History Museum, London as neotype of both nominal taxa (no. BM(NH) 1911.10.26.28452; see Warén, 1989, p. 220, pl. 26, figs. 1, 2). The species has recently been figured (Fretter & Graham, 1982, fig. 295; Warén, 1984a, figs. 76, 77; Warén, 1984b, figs. 78, 79). No specimens of Risso have been found in the Muséum National d'Histoire Naturelle in Paris, where most of the Risso collection is kept, and the species was not mentioned by Arnaud (1978).

2. The name *Balea* was proposed by Gray (1824, p. 61) for pulmonate gastropods (family CLAUSILIIDAE). Gray included three species, among them *Pupa fragilis* Draparnaud, 1801 (p. 64), and placed *Turbo perversus* Linnaeus, 1758 (p. 767) in the synonymy of *fragilis* (inappropriately in view of the dates). Herrmannsen (1846, p. 103)

designated *T. perversus* Linnaeus, the senior synonym, as the type species of *Balea*. The name *Balea* was placed on the Official List of Generic Names (Opinion 335, March 1955) with *Pupa fragilis* Draparnaud, 1801 incorrectly given as the type species.

3. Harris (1894, p. 31) designated *Turbo perversus* Linnaeus, 1758 as the type species of *Strombiformis* Da Costa, 1778 (p. 107), a name introduced for a genus of nine species, including *perversus* and *Strombiformis glaber* Da Costa, 1778. Harris noted: 'In 1778 Da Costa employed the name *Strombiformis* to designate certain land and marine mollusca, his first species, and therefore the type of the genus, being *Turbo perversus* Linn.'. This is a valid designation, although the reason given for the choice of type species is not mandatory today (see Recommendation 69B(11) of the Code), and renders *Strombiformis* Da Costa, 1778 a senior objective synonym of *Balea* Gray, 1824. The name *Balea* has consistently been used for the genus and has appeared in popular field guides as well as works on taxonomy, ecology and distribution (see, for example, the following representative recent publications: Kerney, Cameron & Jungbluth (1983), Pflieger & Chatfield (1983), Abbott (1989, p. 68) and Vaught (1989, p. 84)). The name *Strombiformis* has never been used for the genus typified by *perversus* and I propose that it be suppressed.

4. Iredale (1915, p. 293) did not recognise Harris's (1894) type designation and selected *Strombiformis glaber* Da Costa, 1778, the type species of *Eulima* Risso, 1826 (see para. 1 above), as the type species of *Strombiformis*. Among later treatments of the EULIMIDAE, Winckworth (1934, p. 12), Wenz (1940, p. 833), Fretter & Graham (1962, pp. 643, 662), Keen (1971, p. 443), Powell (1979, p. 138) and Graham (1988, p. 520) did not include *Strombiformis* as a valid name in the family. On the other hand, Thiele (1929, p. 227), Dell (1956, p. 79) and Abbott (1974, p. 126) adopted *Strombiformis* in the EULIMIDAE, with *S. glaber* Da Costa as the type species. Vaught (1989, p. 41) doubtfully included *Strombiformis* in the EULIMIDAE. In revisions of the family (Warén, 1984b, p. 43; Bouchet & Warén, 1986, p. 318) I urged that Harris's valid type designation for *Strombiformis* should be followed to avoid nomenclatural confusion concerning *Eulima* as the valid name for the genus. Suppression of the name *Strombiformis* would further stabilise usage of *Eulima*.

5. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to suppress the generic name *Strombiformis* Da Costa, 1778 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) to place on the Official List of Generic Names in Zoology the name *Eulima* Risso, 1826 (gender: feminine), type species by subsequent designation by Herrmannsen (1847) *Turbo subulatus* Donovan, 1804 (an unnecessary replacement name for *Strombiformis glaber* Da Costa, 1778);
- (3) to amend the entry for *Balea* Gray, 1824 on the Official List of Generic Names in Zoology to record the type species as *Turbo perversus* Linnaeus, 1758 by subsequent designation by Herrmannsen (1846);
- (4) to place on the Official List of Specific Names in Zoology the name *glaber* Da Costa, 1778, as published in the binomen *Strombiformis glaber* (senior objective synonym of the specific name of *Turbo subulatus* Donovan, 1804, the type species of *Eulima* Risso, 1826);
- (5) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Strombiformis* Da Costa, 1778, as suppressed in (1) above.

References

- Abbott, R.T. 1974. *American seashells*, Ed. 2. 663 pp., 24 pls. Van Nostrand, New York.
- Abbott, R.T. 1989. *Compendium of landshells. A color guide to more than 2,000 of the world's terrestrial shells*. 240 pp. American Malacologists Inc., Melbourne, Florida.
- Arnaud, P.M. 1978. Révision des taxa malacologiques Méditerranéens introduits par Antoine Risso. *Annales du Muséum d'Histoire Naturelle de Nice*, **5**: 101–150.
- Bouchet, P. & Warén, A. 1986. Revision of the northeast Atlantic bathyal and abyssal Aclididae, Eulimidae, Epitoniidae (Mollusca, Gastropoda). *Bollettino Malacologico Supplemento*, **2**: 297–576.
- Brocchi, G. 1814. *Conchiologia fossile subapennina con osservazioni geologiche sugli apennini e sul suolo adiacente*, vol. 2. Pp. 241–712, 16 pls. Stamperia Reale, Milano.
- Bucquoy, E., Dautzenberg, P. & Dollfus, G. 1883. *Les mollusques marins du Roussillon*, vol. 1, part 4. Pp. 137–195. Paris.
- Da Costa, E.M. 1778. *Historia naturalis testaceorum Britanniae or, the British conchology...* xii, 254, vii pp., 17 pls. Published by the author, London.
- Dell, R.K. 1956. The archibenthal Mollusca of New Zealand. *Bulletin of the Dominion Museum, Wellington*, **18**: 1–235.
- Donovan, E. 1804. *The natural history of British shells*, vol. 5. Pls. 145–180. Published by the author & Rivington, London.
- Draparnaud, J. 1801. *Tableau des mollusques terrestres et fluviatiles de la France*. 116 pp. Renaud, Montpellier.
- Fretter, V. & Graham, A. 1962. *British prosobranch molluscs*. 755 pp. Ray Society, London.
- Fretter, V. & Graham, A. 1982. The prosobranch molluscs of Britain and Denmark. Part 7 ('Heterogastropoda'). *Journal of Molluscan Studies Supplement*, **11**: 363–434.
- Graham, A. 1988. Molluscs: prosobranch and pyramidellid gastropods. *Synopses of the British Fauna*, new series, **2**(Ed.2): 1–662.
- Gray, J.E. 1824. On *Balea*. *Zoological Journal*, **1**: 61–62.
- Gray, J.E. 1847. A list of the genera of recent Mollusca, their synonyma and types. *Proceedings of the Zoological Society of London*, **15**: 129–219.
- Harris, G.F. 1894. On the alternation of the generic name *Clausilia*. *Proceedings of the Malacological Society of London*, **1**(2): 31.
- Herrmannsen, A.N. 1846, 1847. *Indicis generum malacozoorum primordia*, vol. 1. Pp. xxvii, 1–232 (1846); Pp. 233–637 (1847). Fischer, Cassellis.
- Iredale, T. 1915. Some more misused molluscan generic names. *Proceedings of the Malacological Society of London*, **11**(5): 291–306.
- Keen, A.M. 1971. *Sea shells of tropical West America*, Ed. 2. xiv, 1064 pp., 22 pls. Stanford University Press, Stanford.
- Kerney, M.P., Cameron, R.A.D. & Jungbluth, J.H. 1983. *Die Landschnecken Nord- und Mitteleuropas*. 384 pp., 24 pls., 368 distribution maps. Parey, Hamburg.
- Linnaeus, C. 1758. *Systema Naturae*, Ed. 10, vol. 1. 824 pp. Salvii, Holmiae.
- Mörch, O.A.L. 1864. Fortegnelse over de i Danmark forekommende Land- og Ferskvands-bløddyr. *Videnskabelige Meddelelser fra den Naturhistoriske Forening i Kjøbenhavn*, **1863**: 265–367.
- Philippi, R.A. 1853. *Handbuch der Conchyliologie und Malacozoologie*. xx, 548 pp. Anton, Halle.
- Pinna, G. & Spezia, L. 1978. Catalogo dei tipi del Museo Civico di Storia Naturale di Milano. V. I tipi dei gasteropodi fossili. *Atti della Società Italiana di Scienze Naturali e del Museo Civico di Storia Naturale di Milano*, **119**(2): 125–180.
- Pfleger, V. & Chatfield, J. 1983. *A guide to snails of Britain and Europe*. 216 pp. Hamlyn, London. [Published in German (1984) and French (1989)].
- Powell, A.W.B. 1979. *New Zealand Mollusca*. xiv, 500 pp., 82 pls. Collins, Auckland.
- Risso, A. 1826. *Histoire naturelle des principales productions de l'Europe méridionale et particulièrement de celles des environs de Nice et des Alpes Maritimes*, vol. 4 (Aperçu sur l'histoire naturelle des mollusques... et des coquilles; Observations sur différents annélides...). 439 pp., 12 pls. Levraut, Paris.
- Thiele, J. 1929. *Handbuch der systematischen Weichtierkunde*, vol. 1, part 1. Pp. 1–376. Fischer, Stuttgart.

- Vaught, K.C.** 1989. *A classification of living Mollusca*. xii, 189 pp. American Malacologists Inc., Melbourne, Florida.
- Warén, A.** 1984a. An anatomical description of *Eulima bilineata* Alder with remarks on and a revision of *Pyramidelloides* Nevill (Mollusca, Prosobranchia, Eulimidae). *Zoologica Scripta*, **12**(4): 273–294.
- Warén, A.** 1984b. A generic revision of the family Eulimidae (Gastropoda, Prosobranchia). *Journal of Molluscan Studies Supplement*, **13**: 1–96.
- Warén, A.** 1989. Designation of neotypes of '*Melanella alba* (Da Costa, 1778)' and '*Eulima glabra* (Da Costa, 1778)'. *Journal of Conchology*, **33**(4): 219–224.
- Wenz, W.** 1940. Gastropoda. Prosobranchia. In Schindewolf, O.H. (Ed.), *Handbuch der Paläozoologie*, vol. 6, Teil 4, Lieferung 6. Pp. 721–960. Borntraeger, Berlin.
- Winckworth, R.** 1934. Names of British marine Mollusca. 2. *Journal of Conchology*, **20**(1): 9–15.

Case 2634

***Xeromunda* Monterosato, 1892 (Mollusca, Gastropoda): proposed designation of *Helix candiota* Mousson, 1854 as the type species**

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Abstract. The purpose of this application is to designate *Helix candiota* Mousson, 1854, an originally included nominal species, as the type species of the terrestrial snail genus *Xeromunda* (HYGROMIIDAE). The name of the present type species, *Helix turbinata* Cristofori & Jan, 1832, is indeterminate but referred to Sicilian material, whereas *Xeromunda* was based on Greek specimens.

1. Monterosato (1892, p. 25) established *Xeromunda* for a group of the 'Xerophilae' living in mainland Greece and 'Siria' (Syra, one of the Cyclades islands), and placed in it '*H. turbinata*, *Candiota*'. Xerophilae was a vernacular name derived from *Xerophila* Held, 1837, and not a family-group name. In the same year '*Hel. turbinata*' was designated as the type species in an anonymous (but believed to be written by Kobelt, the editor of the *Nachrichtenblatt*) report (1892, p. 152) of the Monterosato paper.

2. Although Monterosato and Kobelt did not specify the authorship of the *Helix turbinata* referred to, it is clear that it must have been the one usually known at the time as *H. turbinata* Cristofori & Jan, 1832, or more simply as *H. turbinata* Jan. They could not have intended to refer to *H. turbinata* Gmelin, [1791] (p. 3668) or Deshayes, 1830 (p. 265), because those do not belong to the 'Xerophilae', and *H. variabilis* Cafici, 1883 (p. 32), which included a 'var. *turbinata*', was placed by Monterosato in a different 'group' of the Xerophilae, namely *Xerolauta* Monterosato, 1892 (p. 23).

3. *Helix turbinata* Cristofori & Jan, 1832 was described (Conchylia, p. 4, locality: Mantissa, p. 2, description) as living in Sicily. No type material exists, since the collection of Cristofori and Jan in the Museo Civico di Storia Naturale in Milan was destroyed in the second world war. The original description is very brief, and might include many species, e.g. of *Cerņuella* Schlüter, 1838. *Xeromunda*, on the other hand, was based on Greek specimens (the Monterosato collection in the Museo Civico di Storia Naturale in Rome contains only Greek material), and Mousson (1854, p. 10) had described *Helix candiota* from Greek localities as a species distinct from *H. turbinata* of Sicily; he regarded the latter as a synonym of *H. aradasii* Pirajno di Mandralisca, 1842 (p. 6). Mousson pointed out that Pfeiffer (see, for example, 1848, p. 155) had used the name '*turbinata* Jan' for Greek specimens. Kobelt (1877, pp. 106–107), while recognizing that *H. turbinata* had been based on Sicilian specimens, nevertheless on the grounds of usage continued to use the name for the Greek species: it was presumably in this (Greek) sense that he meant '*Hel. turbinata*' when in 1892 he designated the type species of *Xeromunda*. The identity of *H. turbinata* Cristofori & Jan and *H. aradasii* has been disputed, and since Pfeiffer various workers have used *H. turbinata* for Sicilian and/or

Greek material. This name is not only a junior primary homonym but is also indeterminate, and it has a confused history (see Manganelli & Giusti, 1989; further details have been given to the Commission Secretariat).

4. It is therefore recommended that *Helix candiota* Mousson, 1854 (p. 10) be designated as the type species of *Xeromunda*. This is the earliest available name for the species named '*H. turbinata*, *Candiota*' by Monterosato when he proposed *Xeromunda* and that named by Kobelt when he designated *turbinata* as the type species. The designation of *H. candiota* is in accordance with past and current usage of *Xeromunda* (Hesse, 1934; Fuchs & Käufel, 1936; Clerx & Gittenberger, 1977; Hausdorf, 1988, 1990; Manganelli & Giusti, 1989).

5. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to set aside all previous fixations of type species for the nominal genus *Xeromunda* Monterosato, 1892, and to designate *Helix candiota* Mousson, 1854 as the type species;
- (2) to place on the Official List of Generic Names in Zoology the name *Xeromunda* Monterosato, 1892 (gender: feminine), type species by designation in (1) above *Helix candiota* Mousson, 1854;
- (3) to place on the Official List of Specific Names in Zoology the name *candiota* Mousson, 1854, as published in the binomen *Helix candiota* (specific name of the type species of *Xeromunda* Monterosato, 1892).

References

- Cafici, C. 1883. Note su alcune conchiglie terrestri della Sicilia. *Il Naturalista Siciliano*, **2**: 29–33.
- Clerx, J.P.M. & Gittenberger, E. 1977. Eniges über *Cernuella* (Pulmonata, Helicidae). *Zoologische Mededelingen*, **52**: 27–56.
- Cristofori, J. De & Jan, G. 1832. *Catalogus in IV sectiones divisus rerum naturalium in Museo exstantium Josephi De Cristofori et Georgii Jan...* Sectio IIa. Conchyliologia. (Conchyliia terrestrium et fluviatilia, 8 pp.; Mantissa, 4 pp.). Carmignani, Parma.
- Deshayes, G.P. 1830. *Encyclopédie méthodique. Histoire naturelle des vers*, vol. 2. vii, 594 pp. Agasse, Paris.
- Fuchs, A. & Käufel, F. 1936. Anatomische und systematische Untersuchungen an Land- und Süßwasserschnecken aus Griechenland und von den Inseln des Ägäischen Meeres. *Archiv für Naturgeschichte*, (2)**5**(4): 541–662.
- Gmelin, G.F. [1791]. *Caroli a Linné Systema Naturae*, Ed. 13, vol. 1, part 6 (Vermes). Pp. 3021–3910. Lugduni.
- Hausdorf, B. 1988. Zur Kenntnis der systematischen Beziehungen einiger Taxa der Helicellinae Ihering 1909 (Gastropoda: Hygromiidae). *Archiv für Molluskenkunde*, **119**(1–3): 9–37.
- Hausdorf, B. 1990. Die *Xeromunda*-Arten des griechischen Festlandes (Gastropoda: Hygromiidae). *Archiv für Molluskenkunde*, **119**(4–6): 107–132.
- Hesse, P. 1934. Zur Anatomie und Systematik palaearktischer Stylommatophoren. *Zoologica* (Stuttgart), **33** (Heft 85): 1–59.
- Kobelt, W. 1877. In Rossmässler, E.A., *Iconographie der Land- und Süßwasser-Mollusken, mit vorzüglicher Berücksichtigung der europäischen noch nicht abgebildeten Arten*, vol. 5. 129 pp., 30 pls. Kreidel, Wiesbaden.
- [Kobelt, W.] 1892. Literaturbericht. *Nachrichtsblatt der Deutschen Malacozoologischen Gesellschaft*, **24**(7–8): 149–152.
- Manganelli, G. & Giusti, F. 1989. Notulae Malacologicae, XLIII. *Xeromunda* Di Maria Di Monterosato in Italy (Pulmonata: Hygromiidae). *Bollettino Malacologico*, **25**: 1–22.

- Monterosato, T.A. (Di Maria di).** 1892. Molluschi terrestri delle isole adiacenti alla Sicilia. *Atti della Regia Accademia di Scienze, Lettere e Belle Arti di Palermo*, (3)2: 1-33.
- Mousson, A.** 1854. *Coquilles terrestres et fluviatiles, recueillies par M. le Prof. Bellardi dans un voyage en Orient*. 59 pp. Zurcher & Furrer, Zurich.
- Pfeiffer, L.** 1848. *Monographia Heliceorum viventium...*, vol. 1. xxxii, 484 pp. Brockhaus, Lipsiae.
- Pirajno di Mandralisca, E.** 1842. Nota di talune specie di Molluschi terrestri e fluviatili di Sicilia. *Giornale di Scienze, Lettere e Arti della Sicilia*, 230: 1-10.

Case 2798

***Lincus* Stål, 1867 (Insecta, Heteroptera): proposed conservation, and *L. croupius* Rolston, 1983: proposed conservation of the specific name**

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Abstract. The main purpose of this application is the conservation of the shield bug generic name *Lincus* Stål, 1867 (PENTATOMIDAE) by the suppression of the unused senior subjective synonym *Audinetella* Spinola, 1850. Species of *Lincus* are vectors of diseases of cultivated palms in South America caused by flagellates (*Phytomonas* sp.). One of these species is *L. croupius* Rolston, 1983, and the conservation of its specific name by the suppression of the unused subjective synonym *bipunctata* Spinola, 1850 is also proposed.

1. Spinola (1850, p. 86) described the genus *Audinetella* (see also p. 35) with the single included species *Audinetella bipunctata* (p. 88).

2. The two female syntypes of *Audinetella bipunctata*, preserved in the Museo Regionale di Scienze Naturale, Turin (Casale, 1981, p. 56), are not conspecific. One is *Lincus croupius* Rolston, 1983 (p. 12) and the other a *Paralincus* species that is apparently unnamed. Spinola's description, however, fits only *Lincus croupius* in several critical characters. He described the species as 10 mm in length, the 2nd and 3rd antennal segments as subequal in length, the anterior prothoracic angles as lobate (emphasizing this character by italics), and the legs as unarmed. The *Lincus croupius* specimen is 10.9 mm in length, the 2nd and 3rd antennal segments are each 1 mm, the anterior prothoracic angles are lobate, and the legs are unarmed. By contrast, the *Paralincus* sp. specimen is 13.5 mm long, the 2nd antennal segment is 1.7 mm in length and the 3rd is 1.1 mm, the anterior prothoracic angles are small and triangular, and all femora are armed with numerous tubercles. Therefore, there is no doubt that the binomen *Audinetella bipunctata* applies to the *Lincus croupius* specimen, and it is indeed possible that the *Paralincus* specimen was added at a later date by a person unknown.

3. *Audinetella* Spinola, 1850 is senior to both *Lincus* Stål, 1867 (p. 524; type species by monotypy *Pentatoma rufospilota* Westwood, 1837, p. 44) and *Paralincus* Distant, 1911 (p. 246). However, the name *Audinetella* and the specific name of *A. bipunctata* have not appeared in the primary literature since the original description.

4. There is a considerable number of systematic papers in which *Lincus* has been used as a valid name (Stål, 1867, 1872; Distant, 1899, 1900; Breddin, 1904, 1908; Rolston, 1981, 1983, 1989; and Dolling, 1984). There are 35 described species in the genus and some of these are known or suspected vectors of palm diseases caused by flagellates (*Phytomonas* sp.). In the past few years considerable work has been done on vector species of *Lincus* (Perthuis, Desmier de Chenon & Merland, 1978, 1985; Desmier

de Chenon, 1984; Perthuis, 1985; Louise, Dollet & Mariau, 1986; Licerias & Licerias de Hidalgo, 1987; Dollet & Wallace, 1987; Couturier & Kahn, 1989; Llosa, Couturier, & Kahn, 1990; Rasplus, Pluot-Sigwalt, Llosa & Couturier, 1990). Several of these papers report *Lincus croupius* Rolston, 1983 as a vector of 'hartrot' of coconut palms. Since the names *Lincus* and *croupius* are in current use in both taxonomic and applied literature their replacement by the unused senior subjective synonyms *Audinetella* and *bipunctata* would be disruptive.

5. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to suppress the following names for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:
 - (a) the generic name *Audinetella* Spinola, 1850;
 - (b) the specific name *bipunctata* Spinola, 1850, as published in the binomen *Audinetella bipunctata*;
- (2) to place on the Official List of Generic Names in Zoology the name *Lincus* Stål, 1867 (gender: masculine), type species by monotypy *Pentatoma rufospilota* Westwood, 1837;
- (3) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *rufospilota* Westwood, 1837, as published in the binomen *Pentatoma rufospilota* (specific name of the type species of *Lincus* Stål, 1867);
 - (b) *croupius* Rolston, 1983, as published in the binomen *Lincus croupius*;
- (4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Audinetella* Spinola, 1850, as suppressed in (1)(a) above;
- (5) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *bipunctata* Spinola, 1850, as published in the binomen *Audinetella bipunctata* and as suppressed in (1)(b) above.

Acknowledgement

W.R. Dolling provided a photocopy of Spinola's 1850 separates and reprints of his own papers on *Lincus*.

References

- Breddin, G. 1904. Neue Rhynchotenausbeute aus Süd-Amerika. *Societas Entomologica*, **18**(20): 153–154.
- Breddin, G. 1908. Beiträge zur Systematik der Pentatomiden Südamerikas. Zweites Stück. *Sitzungs-Berichten der Gesellschaft Naturforschender Freunde zu Berlin*, **1908**: 24–36.
- Casale, A. 1981. *Cataloghi. II. Collezione Emittologica di Massimiliano Spinola*. 120 pp. Museo Regionale di Scienze Naturali, Torino.
- Couturier, G. & Kahn, F. 1989. Bugs of *Lincus* spp. vectors of Marchitez and Hartrot (oil palm and coconut diseases) on *Astrocaryum* spp., Amazonian native palms. *Principes*, **33**(1): 19–20.
- Desmier de Chenon, R. 1984. Recherches sur le genre *Lincus* Stål, Hemiptera Pentatomidae Discocephalinae, et son rôle éventuel dans la transmission de la Marchitez du palmier à huile et du Hart-Rot du cocotier. *Oléagineux*, **39**(1): 1–6.
- Distant, W.L. 1899. XLIX. Rhynchotal notes. III. Heteroptera: Discocephalinae and Pentatominae (part). *Annals and Magazine of Natural History*, (7)**4**(24): 421–445.
- Distant, W.L. 1900. Contributions to a knowledge of the Rhynchota. II. Rhynchota of Central America. *Transactions of the Royal Entomological Society of London*, **1900**: 687–695.

- Distant, W.L. 1911. XXVIII. Rhynchotal Notes. LIII. Neotropical Pentatomidae. *Annals and Magazine of Natural History*, (8)7(39): 242–258.
- Dollet, M. & Wallace, F.G. 1987. Compte rendu du premier *Phytomonas* workshop — Cayenne, Mars 1987. *Oléagineux*, 42(12): 461–468.
- Dolling, W.R. 1984. Pentatomid bugs (Hemiptera) that transmit a flagellate disease of cultivated palms in South America. *Bulletin of Entomological Research*, 74: 473–476.
- Liceras, L. & Liceras de Hidalgo, J. 1987. *Lincus* sp. (Hem.: Pentatomidae), agente vector de la 'marchitez súbita' de la palma aceitera en el Perú. *Revista Peruana de Entomología*, 30: 103–104.
- Llosa, J.F., Couturier, G. & Kahn, F. 1990. Notes on the ecology of *Lincus spureus* and *L. malevolus* (Heteroptera: Pentatomidae: Discocephalinae) on Palmae in forests of Peruvian Amazonia. *Annales de la Société Entomologique de France*, (2)26(2): 249–254.
- Louise, C., Dollet, M. & Mariau, D. 1986. Recherches sur le Hartrot du cocotier, maladie à *Phytomonas* (Trypanosomatidae) et sur son vecteur *Lincus* sp. (Pentatomidae) en Guyane. *Oléagineux*, 41(10): 437–449.
- Perthuis, B., Desmier de Chenon, R. & Merland, E. 1978. Revelation of the Marchitez sorpresiva vector of the oil palm—the bug *Lincus lethifer* Dolling (Hemiptera Pentatomidae Discocephalinae). *Oléagineux*, 33(5): 216–217.
- Perthuis, B., Desmier de Chenon, R. & Merland, E. 1985. Mise en évidence du vecteur de la Marchitez sorpresiva du palmier à huile, la punaise *Lincus lethifer* Dolling (Hemiptera Pentatomidae Discocephalinae). *Oléagineux*, 40(10): 473–475.
- Rasplus, J.-Y., Pluot-Sigwalt, D., Llosa, J.F. & Couturier, G. 1990. *Hexacladia linci*, n. sp. (Hymenoptera: Encyrtidae) endoparasite of *Lincus malevolus* Rolston (Heteroptera: Pentatomidae) au Pérou. *Annales de la Société Entomologique de France*, (2)26(2): 255–263.
- Rolston, L.H. 1981. Ochlerini, a new tribe in Discocephalinae (Hemiptera: Pentatomidae). *Journal of the New York Entomological Society*, 89(1): 40–42.
- Rolston, L.H. 1983. A revision of the genus *Lincus* Stål (Hemiptera: Pentatomidae: Discocephalinae: Ochlerini). *Journal of the New York Entomological Society*, 91(1): 1–47.
- Rolston, L.H. 1989. Three new species of *Lincus* (Hemiptera: Pentatomidae) from palms. *Journal of the New York Entomological Society*, 97(3): 271–276.
- Spinola, M. 1850. *Tavola sinottica dei generi spettanti alla classe degli insetti arthrodignati Hemiptera* Linn., Latr. *Rhyngota* Fabr., *Rhynchota* Burm. 138 pp. Camera, Modena.
- Stål, C. 1867. Bidrag till Hemipterernas Systematik. Conspectus generum Pentatomidum Americae. *Öfversigt af Kongliga Svenska Vetenskaps-Akademiens Förhandlingar*, 24(7): 522–532.
- Stål, C. 1872. Enumeratio Hemipterorum. 2. Enumeratio cimicinarum Americae. *Kongliga Svenska Vetenskaps-Akademiens Handlingar*, 10(4): 3–65.
- Westwood, J.O. 1837. *A catalogue of Hemiptera in the collection of the Rev. F.W. Hope with short Latin descriptions of new species*, part 1. 46 pp. London.

Case 2764

***Acrolocha* Thomson, 1858 (Insecta, Coleoptera): proposed conservation, and *Coprophilus* Latreille, 1829: proposed designation of *Staphylinus striatulus* Fabricius, 1792 as the type species**

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Abstract. The purpose of this application is to conserve the usage of the names *Acrolocha* Thomson, 1858 and *Coprophilus* Latreille, 1829 for genera of rove beetles (STAPHYLINIDAE). *Acrolocha* is threatened by the senior objective synonym *Elonium* Leach in Samouelle, 1819, a name that has caused confusion because it has been used for two completely different taxa, *Acrolocha* and *Coprophilus* in the OMALIINAE and OXYTELINAE respectively. The usage of *Coprophilus* is maintained by the proposed designation of *Staphylinus striatulus* Fabricius, 1792 as the type species.

1. Leach in Samouelle (1819, p. 175) erected the new genus *Elonium*, giving *Omalium striatum* as its type and only included species; he did not cite an author's name with the species. The name *Elonium* has been credited to Samouelle by some subsequent authors.

2. Stephens (1829a, p. 25) and Curtis (1829, col. 29) both placed *Omalium striatum* Gravenhorst, 1802 (p. 119) in *Omalium* Gravenhorst, 1802 (p. 111) and *Staphylinus striatulus* Fabricius, 1792 (p. 525) in *Elonium*, apparently regarding Leach's citation of the former species as an error for the latter. Stephens (1833, col. 108; 1834, p. 349) continued to place *O. striatum* Gravenhorst in *Omalium* and (1833, col. 107) *S. striatulus* Fabricius in *Elonium* (although he treated *Elonium* as a synonym of *Coprophilus* Latreille, 1829; see para. 3).

3. Latreille (1829, p. 439) erected the new genus *Coprophilus*, with '*Omalium rugosum* Gravenhorst' as the only species named. Gravenhorst (1802, p. 115) attributed *Staphylinus rugosus* (placed in *Omalium*) to Olivier (1795; genus no. 42, p. 30), who in turn referred it to *S. rugosus* Fabricius, 1775 (p. 267). Olivier repeated Fabricius's description and mentioned two more Fabrician references, as well as providing illustrations (pl. 5, fig. 43). It follows from this that the nominal species *Staphylinus rugosus* Fabricius, 1775 is the type of *Coprophilus* by monotypy. However, at least since 1829 (Curtis, cols. 29, 30; Stephens, 1829a, p. 24; 1829b, pp. 293, 297), *rugosus* Fabricius has been consistently placed in *Oxytelus* Gravenhorst, 1802. The name *rugosum* 'Ol.' or 'Grav.' has been treated as a synonym of *Staphylinus striatulus* Fabricius, 1792 and placed in *Elonium* or *Coprophilus* (see para. 2). Like Stephens (1833), Erichson (1839, p. 609) and Lacordaire (1854, p. 120) listed *Elonium* as a synonym of the younger name *Coprophilus* without comment. These authors and also Kraatz (1857, p. 1000) kept *striatum* Gravenhorst in *Omalium*.

4. Thomson (1858, p. 38) erected the new genus *Acrolocha* with *Omalium striatum* [no author cited] as type species by original designation and monotypy; the combination *Acrolocha striata* (Gravenhorst, 1802) has been widely used since (see para. 12). *Acrolocha* is thus a junior objective synonym of *Elonium* (see para. 1).

5. Tottenham (1949, p. 359) followed Stephens and Curtis of 1829 (and Westwood, [1838], p. 18) in regarding *Staphylinus striatulus* Fabricius as the type species of *Elonium*. As part of his justification, Tottenham said '...besides, it is inconceivable that at that date [1819] Samouelle [sic, correctly Leach] should have separated *striatum* Gravenhorst from the genus *Omalium*... The true *Omalium striatum* Gravenhorst, 1802, has never been taken in Britain'. In 1954 Tottenham stated (p. 38) that the wide distribution of *S. striatulus* in Britain supported the idea that Leach was actually dealing with that species when he erected *Elonium* (see also para. 2), although on p. 19 he suggested that previous British records of *Acrolocha striata* (Gravenhorst) actually referred to *A. sulcula* (Stephens, 1834) (see para. 10).

6. Blackwelder (1952, p. 146) agreed with Tottenham (1949) that 'an error is evident in Samouelle's citation...' and that the original designation of *Omalium striatum* as type species of *Elonium* referred to *S. striatulus* Fabricius, which is placed in the OXYTELINAE. He corrected Tottenham's attribution of *Elonium* to Samouelle, giving Leach as the author. Arnett (1960, pp. 238, 255), Watanabe & Shibata (1961, p. 43), Burakowski, Mroczkowski & Stefanska (1979, p. 81), Muona (1979, p. 19) and Hayashi (1981, p. 88) followed Blackwelder and Tottenham, using the name *Elonium* in the OXYTELINAE without comment.

7. Steel (1957, p. 157) used the name *Acrolocha*, without comment, in revising the genus of OMALIINAE that includes *Omalium striatum* Gravenhorst, which he treated as a junior synonym of *Staphylinus minutus* Olivier, 1795 (genus no. 42, p. 38).

8. Herman (1970, p. 367) disagreed with Stephens, Tottenham and Blackwelder's interpretation of Leach's intention, arguing that his designation of *striatum* as type should be taken literally, with *Elonium* being a senior objective synonym of *Acrolocha* and belonging to the OMALIINAE. This leaves *Coprophilus* Latreille, 1829 as the name for the genus of OXYTELINAE that includes *striatulus*. Herman pointed out (apparently for the first time) that Stephens never explained why he regarded Leach's designation of '*Omalium striatum*' as an error for *Staphylinus striatulus* Fabricius.

9. As stated in para. 3, the type species of *Coprophilus* is formally *Staphylinus rugosus* Fabricius, 1775, but since the year (1829) when Latreille proposed *Coprophilus* that nominal species has been placed in *Oxytelus*, while *S. striatulus* Fabricius, 1792 has been synonymized with '*Omalium rugosum* Gravenhorst'. I propose that *S. striatulus* be designated as the type species of *Coprophilus*. The following authors use *Coprophilus* in this sense: Kloet & Hincks (1977), Moore & Legner (1979), Harde (1984) and Uéno, Kurosawa & Satô (1985) and a further list of 41 references is held by the Commission Secretariat.

10. Kloet & Hincks (1977, p. 23) followed Tottenham (1954, p. 19, but not p. 38: see para. 5) in saying that the name *striatum* Gravenhorst, 1802 (placed in either *Omalium* or *Acrolocha*) has been widely used by British authors for what is really *Anthobium sulculum* Stephens, 1834 (p. 336), first described from Britain. It is possible, perhaps even likely, that Leach was one, or the first, of these authors. This would explain his seemingly unlikely choice of a species (*striatum*) not then occurring in Britain as the type species of his genus *Elonium*. No one appears to have considered either specimens or the text accompanying the type species designation of *Elonium* in attempting to

understand Leach's intent. Leach's collection is in the Natural History Museum, London (Hammond, 1972, p. 130). My search in late 1989 of both the general and British collections there failed to uncover any Leach specimens of *striatum*, *striatulus* or *sulculum*, so Leach's own collection offers no help. Although brief, Leach's (1819, p. 174) characterization of *Omalium* (s.l., including his new genera *Elonium* and *Anthobium*) included: 'thorax transverse-quadrate, the anterior angles rounded'. Examination of specimens of the three species in question shows that: *striatulus* has the pronotum quadrate to slightly elongate, with the anterior corners strongly narrowed and protruding forward alongside the head; *striatum* has the pronotum transverse with obtusely angulate anterior corners; and *sulculum* has the pronotum slightly transverse with distinctly rounded anterior corners. These observations and current knowledge of the history of the British fauna suggest, in agreement with Tottenham (1954, p. 19) and Kloet & Hincks (1977), that what Leach meant by *Omalium striatum* was actually the species now correctly known as *sulculum* Stephens, and not *striatulus* Fabricius. *Elonium* Leach was, therefore, based on a misidentification of the type species.

11. There seems no reason to ignore both Leach's text and his apparent intent by designating *Staphylinus striatulus* as the type species of *Elonium*. This leaves a choice between *Omalium striatum* Gravenhorst (the nominal species given by Leach) and *Anthobium sulculum* Stephens (the taxonomic species Leach was probably dealing with). There seems no doubt that the two are congeneric (e.g. Steel, 1957), and choice of either as type species would result in the use of *Elonium* Leach in Samouelle (1819) for the genus of OMALIINAE usually known as *Acrolocha* Thomson, 1858, even since Herman's (1970) paper (see para. 8).

12. My search of the literature reveals only six relatively recent uses of *Elonium* for the genus generally known as *Acrolocha*: Moore & Legner (1974, p. 553; 1975, p. 187), by myself (Thayer, 1978, p. 148 — actually a misidentification based on Moore & Legner (1974)), Uhlig & Vogel (1981, p. 84), Lohse & Lucht (1989, pp. 126, 285) and Koch (1989, p. 221). The last two are not really independent uses. All other works I have examined use the name *Acrolocha* instead of *Elonium*; Harde (1984), Mahler (1987) and Zanetti (1987) are examples, and a list of 28 works by 25 authors in the last 40 years is held by the Commission Secretariat. I know of five relatively recent uses of *Elonium* in the OXYTELINAE, i.e. as a synonym of the much more widely used *Coprophilus* (see para. 6).

13. Because of (1) the confusion engendered by past use of the name *Elonium* for two completely different taxa in the OMALIINAE and OXYTELINAE, (2) the existence of the more widely used name *Coprophilus* for the latter of these, and (3) the existence of the much more commonly used junior synonym *Acrolocha* for the other, I propose that the best course to promote stability of nomenclature is to suppress the name *Elonium* and to continue to use *Coprophilus* and *Acrolocha* for the two genus-group taxa involved. Although neither of the genera is of economic or medical importance (with concomitant frequent citation), it is an undesirably confusing situation.

14. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers:

(a) to suppress the generic name *Elonium* Leach in Samouelle, 1819 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;

- (b) to set aside all previous fixations of type species for *Coprophilus* Latreille, 1829, and to designate the nominal species *Staphylinus striatulus* Fabricius, 1792 as the type species of the genus;
- (2) to place on the Official List of Generic Names in Zoology the following names:
 - (a) *Acrolocha* Thomson, 1858 (gender: feminine), type species by original designation *Omalium striatum* Gravenhorst, 1802;
 - (b) *Coprophilus* Latreille, 1829 (gender: masculine), type species by designation in (1)(b) above *Staphylinus striatulus* Fabricius, 1792;
- (3) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *striatum* Gravenhorst, 1802, as published in the binomen *Omalium striatum* (specific name of the type species of *Acrolocha* Thomson, 1858);
 - (b) *striatulus* Fabricius, 1792, as published in the binomen *Staphylinus striatulus* (specific name of the type species of *Coprophilus* Latreille, 1829);
- (4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Elonium* Leach in Samouelle, 1819, as suppressed in (1)(a) above.

Acknowledgements

This work was supported by U.S. National Science Foundation grant BSR-8806625. I thank J.H. Frank, A. Smetana, L. Tóth, M. Uhlig, and L. Zerche for comments on the manuscript, A. Zanetti for calling my attention to two recent references and S.-I. Naomi and A.F. Newton, Jr. for suggestions that improved the original proposal. I also thank P.M. Hammond and R.J.W. Aldridge for their considerable help during my visit to the Natural History Museum, London.

References

- Arnett, R.H. 1960. *The beetles of the United States*. xii, 1112 pp. Catholic University Press, Washington.
- Blackwelder, R.E. 1952. The generic names of the beetle family Staphylinidae with an essay on genotypy. *Bulletin of the United States National Museum*, **200**: 1–483.
- Burakowski, B., Mroczkowski, M. & Stefanska, J. 1979. Chrzaszczce (Coleoptera), Kusakowate-Staphylinidae, czesc 1. *Katalog Fauny Polski (Catalogus faunae Poloniae)*, **23**(6): 1–310.
- Curtis, J. 1829–[1831]. *A guide to an arrangement of British insects*. vi pp., 256 cols. Published by the author, London.
- Erichson, W.F. 1839. *Die Käfer der Mark Brandenburg*, vol. 1, part 2. Pp. 385–740. Morin, Berlin.
- Erichson, W.F. 1840. *Genera et species Staphylinorum, insectorum coleopterorum familiae*, part 2. Pp. 401–954. Morin, Berlin.
- Fabricius, J.C. 1792. *Entomologia systematica emendata et aucta...*, vol. 1, part 2. 538 pp. Proft, Hafniae.
- Gravenhorst, J.L.C. 1802. *Coleoptera microptera Brunsvicensia nec non exoticorum quotquot exstant in collectionibus entomologorum Brunsvicensium in genera, familiae et species distribuit*. lxvi, 206 pp. Reichard, Brunsvigae.
- Hammond, P.M. 1972. On the type material of Staphylinidae (Col.) described by T. Marsham and J.F. Stephens. *Entomologist's Gazette*, **23**: 129–135.
- Harde, K.W. 1984. *A field guide in colour to Beetles*. 334 pp. Octopus Books, London.
- Hayashi, N. 1981. [Illustrations for identification of the Coleopterous larvae living in dead trees.] *Memoirs of the Educational Institute for Private Schools in Japan*, **81**: 83–96. [In Japanese.]
- Herman, L.H. 1970. Phylogeny and reclassification of the genera of the rove-beetle subfamily Oxytelinae of the world (Coleoptera, Staphylinidae). *Bulletin of the American Museum of Natural History*, **142**: 343–454.

- Kloet, G.S. & Hincks, W.D. 1977. A checklist of British insects, Coleoptera and Strepsiptera. *Handbooks for the identification of British Insects*, Ed. 2, vol. 11, part 3. xiv, 105 pp. Royal Entomological Society of London, London.
- Koch, K. 1889. *Die Käfer Mitteleuropas*, Ökologie Band 1, vol. E1. 440 pp. Goecke & Evers, Krefeld.
- Kraatz, G. 1857. Omalini. Pp. 904–1019 in: *Naturgeschichte der Insekten Deutschlands*, Abt. 1 (Coleoptera), vol. 2. (Staphylinii). Pp. 377–1080. Nicolai, Berlin.
- Lacordaire, J.T. 1854. *Histoire naturelle des insectes. Genera des coléoptères*, vol. 2. 548 pp. Roret, Paris.
- Latreille, P.A. 1829. *Le Règne animal...* (Ed. Cuvier, G.L.C.F.D.), Ed. 2, vol. 4. Crustacés, arachnides et partie des insectes. 584 pp. Déterville, Paris.
- Leach, W.E. 1819. Class V. Insecta. Pp. 134–304 in: Samouelle, G., *The entomologist's useful compendium*. 496 pp., 12 pls. Boys, London.
- Lohse, G.A. & Lucht, W.H. 1989. *Die Käfer Mitteleuropas*, vol. 12. 1. Supplementband mit Katalogteil. 346 pp. Goecke & Evers, Krefeld.
- Mahler, V. 1987. Sjette tillæg til 'Fortegnelse over Danmarks biller' (Coleoptera). *Entomologiske Meddelelser*, 54: 181–235.
- Moore, I. & Legner, E.F. 1974. Bibliography (1758 to 1972) to the Staphylinidae of America north of Mexico (Coleoptera). Keys to the genera of the Staphylinidae of America north of Mexico exclusive of the Aleocharinae (Coleoptera: Staphylinidae). *Hilgardia*, 42: 511–563.
- Moore, I. & Legner, E.F. 1975. *A catalogue of the Staphylinidae of America North of Mexico (Coleoptera)*. Division of Agricultural Sciences, University of California Special Publication, no. 3015. 514 pp. University of California Press, Berkeley, California.
- Moore, I. & Legner, E.F. 1979. *An illustrated guide to the genera of the Staphylinidae of America north of Mexico exclusive of the Aleocharinae (Coleoptera)*. Division of Agricultural Sciences, University of California Priced Publication, no. 4093, 332 pp. University of California Press, Berkeley, California.
- Muona, J. 1979. *Staphylinidae*. Pp. 14–28 in: Silfverberg, H. (Ed.), *Enumeratio Coleopterorum Fennoscandiae et Daniae*. 79 pp. Helsingfors Entomologiska Bytesförening, Helsinki.
- Olivier, G.A. 1795. *Entomologie, ou histoire naturelle des insectes... Coléoptères*, vol. 3. 495 pp. Paris.
- Steel, W.O. 1957. Notes on the Omaliinae. (8) The genus *Acrolocha* Thomson. *Entomologist's Monthly Magazine*, 93: 157–164.
- Stephens, J.F. 1829a. *The nomenclature of British insects...* 68 pp. Baldwin & Cradock, London.
- Stephens, J.F. 1829b. *A systematic catalogue of British insects*, part 1. xxxiv, 416 pp. Baldwin & Cradock, London.
- Stephens, J.F. 1833. *The nomenclature of British insects...* Ed. 2 part 1. 135 columns. Baldwin & Cradock, London.
- Stephens, J.F. 1834. Stenidae–Omalidae. Pp. 305–368 in: *Illustrations of British entomology...*, *Mandibulata*, vol. 5. Baldwin & Cradock, London.
- Thayer, M.K. 1978. Redescription of *Xenicopoda* Moore and Legner (Coleoptera: Staphylinidae, Omaliinae) with supplementary notes. *Psyche*, 84: 142–149.
- Thomson, C.G. 1858. Försök till uppställning af Sveriges Staphyliner. *Öfversigt af Kungliga Vetenskapsakademiens Förhandlingar*, 15: 27–40.
- Tottenham, C.E. 1949. The generic names of British Staphylinidae with a check list of the species. Pp. 343–466 in: *The generic names of British insects*, vol. 1 (1934–1949), part 9. Royal Entomological Society of London, London.
- Tottenham, C.E. 1954. Coleoptera Staphylinidae. Section (a) Piestinae to Euaesthetinae. *Handbooks for the identification of British insects*, vol. 4, part 8a. 79 pp. Royal Entomological Society of London, London.
- Uéno, S.-I., Kurosawa, Y. & Satô, M. 1985. *The coleoptera of Japan in color*, vol. 2. viii, 514 pp. Hoikusha Publishing Co., Osaka, Japan.
- Uhlig, M. & Vogel, J. 1981. Zur Staphylinidenfauna der Umgebung von Waren/Müritz (Mecklenburg). Unter besonderer Berücksichtigung der Naturschutzgebiete 'Ostufer der Müritz', 'Ostufer des Feisensees', und des Flächennaturdenkmals 'Wienpietschseen'. 5.

- Beitrag zur Faunistik der Staphylinidae (Coleoptera). *Mitteilungen aus dem zoologischen Museum in Berlin*, **57**: 75–168.
- Watanabe, Y. & Shibata, Y.** 1961. A revision of the genus *Elonium* Leach in Japan (Col. Staphylinidae). *Journal of Agricultural Science* (Tokyo Nogyo Daigaku), **7**(2): 43–45.
- Westwood, J.O.** [1838]. Synopsis of the genera of British insects, pp. 17–32. Published with *An introduction to the modern classification of insects*, vol. 1, part 3. Pp. 113–160. Longman, Orme, Brown, Green & Longmans, London.
- Zanetti, A.** 1987. Coleoptera. Staphylinidae. Omaliinae. *Fauna d'Italia*, **25**: 1–472.

Case 2782

Carabus mollis Marsham, 1802 (currently *Calathus mollis*; Insecta, Coleoptera): proposed conservation of the specific name

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Abstract. The purpose of this application is to conserve the specific name of the ground beetle *Carabus mollis* Marsham, 1802 by suppression of its unused senior homonym *Carabus mollis* Ström, 1768.

1. Ström (1768, p. 330) described a species *mollis* in the genus *Carabus* Linnaeus, 1758. This name is a junior subjective synonym of *Carabus vaporariorum* Linnaeus, 1758 (p. 415). Since its publication the specific name *mollis* Ström, 1768 has been cited only by Schøyen (1880, p. 179) and Silfverberg (1977, p. 42) as a synonym and as a homonym respectively.

2. In 1802 (p. 456) Marsham described *mollis* in *Carabus*, now placed in *Calathus* Bonelli, 1810, from Ealing, U.K. The species name *Calathus mollis* is well-established. At least 30 different authors have applied this binomen during the last 20 years (e.g. Freude, Harde & Lohse, 1976, p. 206; Kloet & Hincks, 1977, p. 4 and Trautner & Geigenmüller, 1987, p. 288). A list of a further 40 references has been given to the Commission Secretariat. A male lectotype for *Calathus mollis*, here designated, is kept in the Natural History Museum, London. It is labelled 'Lectotypus *Carabus mollis* Marsham/Des. B. Aukema 1990'.

3. Duftschmid (1812, p. 124) described and named *Carabus ochropterus*. Since then *ochropterus* has been treated either as a synonym of *Calathus melanocephalus* (Linnaeus, 1758, p. 356) (see, for example, Schatzmayr, 1937, p. 44 and Jeannel, 1942, p. 845), or as a synonym of *Calathus mollis* (see, for example, Putzeys, 1873). The type of *Carabus ochropterus* is lost (Gusenleitner, 1984).

4. Silfverberg (1977, p. 42) pointed out that, as a junior primary homonym, *Carabus mollis* Marsham, 1802 cannot be used. He suggested use of the name *Calathus ochropterus* (Duftschmid, 1812) for the species. *C. ochropterus* was described from the Schneeberg near Vienna. Since *mollis* Marsham (a species of coastal dunes and blown sands) is not known from Austria (Aukema, 1990), and is unlikely to occur there, it seems highly improbable that *ochropterus* represented the same species as *mollis* Marsham.

5. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to suppress the specific name *mollis* Ström, 1768, as published in the binomen *Carabus mollis*, and all uses of the name *Carabus mollis*

prior to that by Marsham, 1802, for the purposes of both the Principle of Priority and the Principle of Homonymy;

- (2) to place on the Official List of Specific Names in Zoology the name *mollis* Marsham, 1802, as published in the binomen *Carabus mollis* and as defined by the lectotype designated in para. 2 above;
- (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *mollis* Ström, 1768, as published in the binomen *Carabus mollis* and as suppressed in (1) above.

Acknowledgements

Thanks are due to Dr. L.B. Holthuis (*Nationaal Natuurhistorisch Museum, Leiden, The Netherlands*) for his comments on the manuscript.

References

- Aukema, B. 1990. Taxonomy, life-history and distribution of three closely related species of the genus *Calathus* (Coleoptera: Carabidae). *Tijdschrift voor Entomologie*, **133**: 121–141.
- Bonelli, F.A. 1910. Observations entomologiques. I. *Memorie della Accademia delle Scienze di Torino*, **18**: 21–78.
- Dufschmid, C. 1812. *Fauna Austriae*, vol. 2. 311 pp. Linz.
- Freude, H., Harde, K.W. & Lohse, G.A. 1976. Aephaga 1. *Die Käfer Mitteleuropas*, vol. 2. 302 pp. Goecke & Evers, Krefeld.
- Gusenleitner, F. 1984. Das Rätsel um den Verbleib der Caspar Erasmus Duftschmid-Kollektion. *Koleopterologische Rundschau*, **57**: 93–95.
- Jeannel, R. 1942. Coléoptères Carabiques. *Faune de France*, **40**: 572–1173.
- Kloet, G.S. & Hincks, W.D. 1977. A checklist of British insects. Coleoptera and Strepsiptera. *Handbooks for the identification of British insects*, Ed. 2, vol. 11, part 3. xiv, 105 pp. Royal Entomological Society of London, London.
- Linnaeus, C. 1758. *Systema Naturae*, Ed. 10, vol. 1. 824 pp. Salvii, Holmiae.
- Marsham, T. 1802. *Coleoptera Britannica*..., vol. 2. 547 pp., pls. 13–30. White, London.
- Putzeys, J. 1873. Monographie des Calathides. *Annales de la Société Entomologique de Belgique*, **16**: 19–96.
- Schatzmayr, A. 1937. I. Calathus d'Europa. *Publicazioni del Museo Entomologico 'Pietro Rossi' Duino*, **2**: 1–50.
- Schoyen, W.M. 1880. Coleopterologische Notitser. *Entomologisk Tidsskrift*, **1**: 177–185.
- Silfverberg, H. 1977. Nomenclatoric notes on Coleoptera Aephaga. *Notulae Entomologicae*, **57**: 41–44.
- Ström, H. 1768. Beskrivelse over Norske Insecter. Andet Stykke. *Kongelige Norske Videnskabers Selskabs Skrifter*, **4**: 313–371.
- Trautner, J. & Geigenmüller, K. 1987. Tiger beetles — groundbeetles. *Illustrated key to the Cicindelidae and Carabidae of Europe*. 488 pp. Margraf, Aichtal, Germany.

Communication No. 431, The Biological Station, Wijster, The Netherlands

Case 2796

Helophorus Fabricius, 1775 (Insecta, Coleoptera): proposed conservation as the correct original spelling

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Abstract. The purpose of this application is to conserve the name *Helophorus* Fabricius, 1775 for an important genus of water beetle, originally spelt *Elophorus*. Illiger (1801) emended this to *Helophorus* and this spelling is now almost universally used. However, Illiger's emendation was unjustified and it is proposed to rule that *Helophorus* is the correct original spelling.

1. Fabricius (1775, p. 66) established the genus *Elophorus* for two species of water beetle, *Silpha aquatica* Linnaeus, 1758 (p. 362) and a new species *Elophorus minutus* (p. 66).

2. Latreille (1810, p. 428) designated '*E. aquaticus* Fab.' as the type species. Fabricius had stated that the name *Silpha aquatica* referred to the Linnaean species.

3. Fabricius gave no indication of the derivation of his name *Elophorus*. Illiger (1801, p. 138) emended it to *Helophorus* on the grounds that the first part was derived from the Greek 'helos', a swamp. Smetana (1985, p. 18), however, pointed out that the name more probably means 'callus-bearer', and refers to the distinctive swollen ridges on the pronotum. Irrespective of the etymological derivation, Illiger's emendation to *Helophorus* is unjustified under Article 33b of the Code.

4. Illiger's emendation to *Helophorus* has been accepted by most modern authors. Almost all recent works on these beetles in such areas as agricultural entomology, ecology and palaeontology as well as systematics have used the spelling *Helophorus* (e.g. Balfour-Browne (1958), Fernando (1958), Angus (1970, 1982, 1992), Lohse (1971), Richards & Davies (1977), Coope (1979), Smetana (1985, 1988), Hansen (1987), Friday (1988) and Shatrovskiy (1989)). The only important recent works to use the spelling *Elophorus* are Chiesa (1959) and McCorkle (1965). Even the older literature has a preponderance of usage of *Helophorus*. As a summary of older work, Knisch (1924, p. 66) listed 39 authors of major works using the spelling *Helophorus* and 11 using *Elophorus*. A further measure of the relative degree of usage of the two spellings is that, of the approximately 180 species at present known, 20 were originally attributed to *Elophorus*, six to other genera and all the rest to *Helophorus* (data from Smetana (1985, Nearctic), Shatrovskiy (1989, eastern U.S.S.R.) and Angus (1992, Europe and adjacent lands)).

5. *Helophorus* is thus seen to be a large genus, important in the study of various aspects of entomology. As such it is important that the spelling '*Helophorus*' used in the great majority of works, especially the more recent ones, should be maintained.

6. The International Commission on Zoological Nomenclature is accordingly asked:
 - (1) to use its plenary powers to rule that the correct original spelling of the generic name *Elophorus* Fabricius, 1775 is deemed to be *Helophorus*;
 - (2) to place on the Official List of Generic Names in Zoology the name *Helophorus* Fabricius, 1775 (gender: masculine), type species by subsequent designation by Latreille (1810) *Silpha aquatica* Linnaeus, 1758, spelling ruled in (1) above;
 - (3) to place on the Official List of Specific Names in Zoology the name *aquatica* Linnaeus, 1758, as published in the binomen *Silpha aquatica* (specific name of the type species of *Helophorus* Fabricius, 1775);
 - (4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Elophorus* Fabricius, 1775 (ruled in (1) above to be an incorrect original spelling of *Helophorus*).

References

- Angus, R.B. 1970. Genetic experiments on *Helophorus* F. (Coleoptera: Hydrophilidae). *Transactions of the Royal Entomological Society of London*, **122**: 257–276.
- Angus, R.B. 1982. Separation of two species standing as *Helophorus aquaticus* (L.) (Coleoptera, Hydrophilidae) by banded chromosome analysis. *Systematic Entomology*, **7**: 265–281.
- Angus, R.B. 1992 [in press]. Insecta: Coleoptera: Hydrophilidae: Helophorinae. *Süßwasserfauna von Mitteleuropa*, vol. 20, section 10, part 2.
- Balfour-Browne, W.A.F. 1958. *British water beetles*, 3. 210 pp. Ray Society, London.
- Chiesa, A. 1959. *Hydrophilidae Europae — Coleoptera Palpicornia*. 199 pp. Forni, Bologna.
- Coope, G.R. 1979. Late Cenozoic fossil Coleoptera: evolution, biogeography, and ecology. *Annual Review of Ecology and Systematics*, **10**: 247–267.
- Fabricius, J.C. 1775. *Systema Entomologiae*. 832 pp. Flensburgi et Lipsiae.
- Fernando, C.H. 1958. The colonization of small freshwater habitats by aquatic insects. 1. General discussion, methods and colonization in the aquatic Coleoptera. *Ceylon Journal of Science (Biological Science)*, **1**(2): 117–154.
- Friday, L.E. 1988. A key to the adults of British water beetles. *Field Studies*, **7**: 1–151.
- Hansen, M. 1987. The Hydrophiloidea (Coleoptera) of Fennoscandia and Denmark. *Fauna Entomologica Scandinavica*, **18**: 1–254.
- Illiger, K. 1801. Namen der Insekten-Gattungen, ihr Genetiv, ihr grammatisches Geschlecht, ihr Silbenmass, ihr Herleitung; zugleich mit den Deutschen Benennungen. *Magazin für Insektenkunde*, **1**: 125–162.
- Knisch, A. 1924. *Coleopterum Catalogus*, pars 79: Hydrophilidae. 306 pp. Junk, Berlin.
- Latreille, P.A. 1810. *Considérations générales sur l'ordre naturel des animaux composant les classes des Crustacés, des Arachnides et des Insectes avec un tableau méthodique de leurs genres, disposés en familles*. 444 pp. Schoell, Paris.
- Linnaeus, C. 1758. *Systema Naturae*, Ed. 10, vol. 1. 824 pp. Salvii, Holmiae.
- Lohse, G.A. 1971. Familienreihe Palpicornia. Pp. 95–156 in Freude, H., Harde, K.W. & Lohse, G.A. (Eds.), *Die Käfer Mitteleuropas*, 3. Goecke & Evers, Krefeld.
- McCorkle, D.V. 1965. Subfamily Elophorinae. Pp. 23–38 in Hatch, M.H., (Ed.), *The beetles of the Pacific Northwest*, part 4. University of Washington Publications in Biology, vol. 16. University of Washington Press, Seattle.
- Richards, O.W. & Davies, R.G. 1977. *Imms' general textbook of entomology*, Ed. 10, vol. 2. Pp. 421–1354. Chapman & Hall, London.
- Shatrovskiy, A.G. 1989. Hydrophilidae. Pp. 264–293 in Ler, P.A. (Ed.), *Keys to the insects of the Far East of the U.S.S.R.* Nauka, Leningrad. [In Russian.]
- Smetana, A. 1985. Revision of the subfamily Helophorinae of the Nearctic Region (Coleoptera: Hydrophilidae). *Memoirs of the Entomological Society of Canada*, **131**: 1–154.
- Smetana, A. 1988. Review of the family Hydrophilidae of Canada and Alaska (Coleoptera). *Memoirs of the Entomological Society of Canada*, **142**: 1–316.

Case 2776

***Meladema* Laporte, 1835 (Insecta, Coleoptera): proposed conservation**

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Abstract. The purpose of this application is the conservation of the name *Meladema* Laporte, 1835, for a genus of water diving beetles. It is threatened by *Scutopterus* Dejean, 1833, an unused senior synonym.

1. Dejean (1833, p. 54) established the name *Scutopterus* (attributed to Eschscholtz) for three species of diving beetles: *Scutopterus coriaceus* 'Hoffmanseg' (a nomen nudum), *Dytiscus lanio* Fabricius, 1775 (p. 231), and *Dytiscus pustulatus* Rossi, 1792 (p. 68). Crotch (1873, p. 404) selected *coriaceus* as type species, but this is not a valid type designation as this species was only included as a nomen nudum by Dejean. Nilsson, Roughley & Brancucci (1989, p. 307) designated *Dytiscus lanio* as type species of *Scutopterus*.

2. Laporte (1835, p. 98) was the first author to describe the species *coriacea*, which he placed in the new genus *Meladema* without reference to the name *Scutopterus*. The type species of *Meladema* is *M. coriacea* Laporte, 1835 by monotypy.

3. Aubé ([1837], p. 94, see Méquignon in Guignot, 1932, p. 547 for the date of publication) used *Meladema* as a division of *Colymbetes* Clairville, 1806. Chenu (1851, p. 206) noted that *Meladema* corresponded to *Scutopterus* 'Eschscholtz', which had never been described. Chenu also noted that an American species, probably *Dytiscus* (*Meladema*) *distigma* Brullé, [1838] (p. 48; see Sherborn & Woodward, 1901, p. 389 for the date of publication), belonged to this subgenus. Gemminger & Harold (1868, p. 447) erroneously attributed *Scutopterus* to Lacordaire (1835, p. 308; in fact the reference is to *Cymatopterus* 'Eschscholtz' in Dejean, 1833 (p. 54)) and placed *Meladema* Laporte as a synonym. They also added the Holarctic species *Colymbetes dahuricus* Mannerheim in Aubé, [1837] (p. 99) and the Nearctic *Agabus angustus* LeConte, 1850 (p. 213) to *Scutopterus*.

4. Wollaston (1871, p. 220) and Crotch (1873, p. 404) both followed Gemminger & Harold's usage of the name *Scutopterus* and Crotch added the new species *S. hornii*. Sharp (1882, p. 606) reclassified the genus with only *S. angustus* and *S. hornii* in *Scutopterus*, and *M. coriacea*, *M. lanio* and *M. imbricata* in *Meladema*. Sharp's classification has been adopted by all subsequent authors. However, Balfour-Browne (1943, p. 172) suggested that *Scutopterus* (attributed to 'Aubé, 1836') was a junior synonym of *Meladema*, and provided *Neoscutopterus* as a new name for *Scutopterus* sensu Sharp. The synonymy recognized by Balfour-Browne was based on the erroneous assumption that *Scutopterus* was first made available by Aubé ([1837], p. 94), with the consequence that Crotch's (1873) type designation was accepted as valid.

5. The name *Meladema* has been in continuous use since Sharp's (1882) monograph (see, for example, Zimmermann, 1920, p. 214; Guignot, 1932, p. 654; Zimmermann &

Gschwendtner, 1936, p. 101; Guignot, 1961, p. 768 and Franciscolo, 1979, p. 615). The name *Scutopterus* was erroneously applied to the two Nearctic species *angustus* and *hornii* (see para. 4), until Balfour-Browne (1943) replaced it with *Neoscutopterus*. Since then *Scutopterus* has been cited as a junior synonym of *Meladema* (e.g. Guignot, 1961, p. 768). As Dèjean's senior synonym has been unused since Balfour-Browne (1943), it would seem desirable for stability of nomenclature, as suggested by Nilsson. Roughley & Brancucci (1989, p. 314), to suppress the name *Scutopterus* Dejean thereby retaining the more familiar name *Meladema* Laporte.

6. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to suppress the generic name *Scutopterus* Dejean, 1833 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) to place on the Official List of Generic Names in Zoology the name *Meladema* Laporte, 1835 (gender: feminine), type species by monotypy *Meladema coriacea* Laporte, 1835;
- (3) to place on the Official List of Specific Names in Zoology the name *coriacea* Laporte, 1835, as published in the binomen *Meladema coriacea* (specific name of the type species of *Meladema* Laporte, 1835);
- (4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Scutopterus* Dejean, 1833, as suppressed in (1) above.

References

- Aubé, C. [1837]. Pp. 65–224 in: Dejean, P.F.M.A. (Ed.). *Iconographie et histoire naturelle des Coléoptères d'Europe*, vol. 5 (Hydrocanthares). 415 pp., 45 pls. Méquignon-Marvis, Paris.
- Balfour-Browne, J. 1943. A new generic name in the Dytiscidae (Coleoptera). *Proceedings of the Royal Entomological Society of London*, (B)12: 172.
- Brullé, A. [1838]. Insectes Coléoptères. Pp. 17–56 in d'Orbigny, A., *Voyage dans l'Amerique Méridionale*, vol. 6, part 2. 222 pp., 32 pls. Paris.
- Chenu, J.C. 1851. *Encyclopédie d'histoire naturelle. Coléoptères*, vol. 1. 312 pp. Schneider, Paris.
- Crotch, G.R. 1873. Revision of the Dytiscidae of the United States. *Transactions of the American Entomological Society*, 4: 383–424.
- Dejean, A. 1833. *Catalogue des Coléoptères de la collection de M. le Comte Dejean*, Ed. 2, part 1. 96 pp. Méquignon-Marvis, Paris.
- Fabricius, J.C. 1775. *Systema Entomologiae*. 832 pp. Korte, Flensburgi et Lipsiae.
- Franciscolo, M.E. 1979. Coleoptera Haliplidae, Hygrobiidae, Gyrinidae, Dytiscidae. *Fauna d'Italia*, 14: 1–804.
- Gemminger, M. & Harold, B. de. 1868. *Catalogus Coleopterorum*, vol. 2. Pp. 425–752. Monachii, Paris.
- Guignot, F. 1932. Les Hydrocanthares de France. 1057 pp., 5 pls. Douladoure, Toulouse.
- Guignot, F. 1961. Revision des Hydrocanthares d'Afrique (Coleoptera Dytiscoidae), part 3. *Annales du Musée Royal du Congo Belge, Sciences Zoologiques*, 90: 659–995.
- Lacordaire, T. 1835. *Cymatopterus*. Pp. 308–309 in Boisduval, M.M. & Lacordaire, Th., *Faune entomologique des environs de Paris*, vol. 1. 696 pp., 3 pls. Méquignon-Marvis, Paris.
- Laporte, F.L. de. 1835. *Études entomologiques, ou description d'Insectes nouveaux; et observations sur la synonymie*, part 1. (Carnassiers). 195 pp., 4 pls. Méquignon-Marvis, Paris.
- LeConte, J.L. 1850. General remarks upon the Coleoptera of Lake Superior. Pp. 209–241 in Agassiz, L., *Lake Superior; its physical character, vegetation and animals*. 428 pp., 8 pls. Gould, Kendall & Lincoln, Boston.

- Nilsson, A.N., Roughley, R.E. & Brancucci, M. 1989. A review of the genus and family-group names of the family Dytiscidae Leach (Coleoptera). *Entomologica Scandinavica*, **20**(3): 287–316.
- Rossi, P. 1792. Class 1. Eleuterata *Dytiscus*. Pp. 66–70 in: *Mantissa insectorum*...., vol. 1. 148 pp. Polloni, Pisis.
- Sharp, D. 1882. On aquatic carnivorous Coleoptera or Dytiscidae. *Scientific Transactions of the Royal Dublin Society*, (2)**2**: 179–1003.
- Sherborn, C.D. & Woodward, B.B. 1901. Notes on the dates of publication of the natural history portions of some French voyages....*The Annals and Magazine of Natural History, including Zoology, Botany and Geology*, (7)**7**: 388–392.
- Wollaston, T.V. 1871. On additions to the Atlantic Coleoptera. *Transactions of the Entomological Society of London*, **2**: 203–314.
- Zimmermann, A. 1920. Dytiscidae. Pp. 208–296 in: *Coleopterorum Catalogus*, part 71. 296 pp. Junk, Berlin.
- Zimmermann, A. & Gschwendtner, L. 1936. Monographie der paläarktischen Dytisciden. 7. Colymbetinae. (Colymbetini: *Rhantus*, *Nartus*, *Melanodytes*, *Colymbetes*, *Meladema*). *Koleopterologische Rundschau*, **22**: 81–102.

Case 2733

Mycetoporus* Mannerheim, 1831 (Insecta, Coleoptera): proposed designation of *Tachinus punctus* Gravenhorst, 1806 as the type species; proposed conservation of *Ischnosoma* Stephens, 1829; and proposed precedence of *Mycetoporus* over *Ischnosoma

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Abstract. The purpose of this application is to designate *Tachinus punctus* Gravenhorst, 1806 as the type species of *Mycetoporus* Mannerheim, 1831 in accordance with universal understanding and usage. The genus, which is widespread in Europe, Siberia and North America, is included in the large family of rove beetles STAPHYLINIDAE. It is proposed that *Ischnosoma* Stephens, 1829 should also be conserved and that *Mycetoporus* should be given precedence over *Ischnosoma*.

1. Stephens (1829a [June], p. 22) introduced the generic name *Ischnosoma* in a list of British insects; there were ten included species, including *Tachinus splendidus* and *T. punctus*, both of Gravenhorst, 1806 (pp. 24 and 27 respectively), and the name is therefore available (Article 12b(5) of the Code). No type species was designated. The name and the list of included species was repeated in Stephens, 1829b ([July], p. 268; see Fletcher in Nye, 1979, p. xv for the dates of publication of Stephens's works). Subsequently, descriptions of the genus and of the included species were published (Stephens, 1832, p. 168) but again no type was designated.

2. Mannerheim (1831, p. 476) established the generic name *Mycetoporus* with five included species, including *Tachinus splendidus* and *T. punctus*, but did not designate a type. The date of Mannerheim's work has been variously cited by subsequent authors as 1830 or 1831, with or without reference to the *Mémoires présentés à l'Académie Impériale des Sciences de St Pétersbourg*. Mannerheim's paper was presented to members of the Academy in June 1830 and published in vol. 1 of the *Mémoires* in February 1831. A number of authors have cited the name *Mycetoporus* from an 'extract' from the *Mémoires* with the date 1830. Blackwelder (1952, p. 465), however, recorded the extract as '1831, not 1830'. A review by Audinet-Serville of Mannerheim's work (as an extract from the *Mémoires*) appeared in the *Bulletin des Sciences Naturelles et de Géologie* (vol. 24, pp. 211–236); this included a description of *Mycetoporus* and was also published in February 1831. Both Sherborn (1928, p. 4224) and Neave (1940, p. 234) listed *Mycetoporus* Mannerheim as first published in the *Mémoires* in 1831, which I accept here.

3. Stephens adopted the name *Mycetoporus* Mannerheim in the second edition (1833, col. 95) of his (1829a) list of insects, treating his own name *Ischnosoma* as a junior synonym, and in 1835 (p. 434) he noted that 'the generic name [*Mycetoporus*] employed is that of Mannerheim, which he characterised previously to the appearance of my

Ischnosoma, and therefore to be adopted'. However, *Ischnosoma* Stephens was made available in June 1829 (see para. 1), before the publication of *Mycetoporus*.

4. Gistel (1834, p. 9) established the genus *Leichotes* and included six species, two of which were *T. splendidus* and *T. punctus*. Blackwelder (1952, p. 212) designated *splendidus* Gravenhorst, 1806 as the type species of *Leichotes*, rendering *Leichotes* a junior subjective synonym of *Ischnosoma* Stephens, 1829 and *Mycetoporus* Mannerheim, 1831.

5. Westwood ([1838], p. 19; see Direction 63 (June 1957) for the date of publication) designated *T. splendidus* as the type species of *Mycetoporus*; the type species designations in Westwood's *Synopsis of the genera of British insects* were accepted as valid in Opinion 71 (January 1922). Westwood listed *Ischnosoma* Stephens as a synonym of *Mycetoporus*. Between 1838 and 1859 *Mycetoporus* was consistently used as the valid name for the genus in a number of publications, including the important works of Erichson (1839a, p. 411; 1839b, p. 281), Heer (1839, p. 295), Mäklin ([1847]), Redtenbacher (1849, p. 687; 1858, p. 176), Lacordaire (1854, p. 59), Jacquelin du Val (1856, p. 28) and Kraatz (1857, p. 455).

6. Thomson (1859, p. 47) divided *Mycetoporus* Mannerheim into two genera, *Mycetoporus* and *Ischnosoma* Stephens. He designated '*Tachyporus punctus* Gyllenhal, 1810, p. 250' (that is, *Tachinus punctus* Gravenhorst, 1806) as the type species of *Mycetoporus*, and '*Tachyporus splendidus* Gyllenhal, 1810, p. 249' (that is, *Tachinus splendidus* Gravenhorst, 1806) as the type species of *Ischnosoma*, apparently overlooking the earlier designation by Westwood. Thomson's concept of two genera was followed by Sahlberg (1876, pp. 196–203) and Rey (1883, pp. 68, 110). Other authors retained Thomson's type species designations but considered *Ischnosoma* to be a subgenus of *Mycetoporus*: Fowler (1888, p. 212), Ganglbauer (1895, p. 367), Luze (1901, p. 662), Eichelbaum (1909, p. 201) and Reitter (1909, pp. 99, 100). With a few exceptions noted below, all subsequent authors have either placed all species in *Mycetoporus* without recognizing subgenera (Horn, 1877, p. 1200; Hatch, 1957) or have followed Fowler and Ganglbauer and treated *Ischnosoma* as a subgenus of *Mycetoporus*.

7. Gozis (1886) cited *Ischnosoma* as a synonym of *Mycetoporus* and designated *Mycetoporus brunneus* (Marsham, 1802, p. 524) as the type species of both genera; *Mycetoporus brunneus* was described by Paykull (1789) as *Staphylinus brunneus*. These designations are invalid because *Staphylinus brunneus* was not an originally included species of *Mycetoporus* and also because of the earlier designations of Westwood ([1838]) and Thomson (1859). Gozis (1886, p. 14) proposed the new name *Myteroxis* for the genus *Ischnosoma* as used by Thomson and designated *Tachinus splendidus* Gravenhorst, 1806 as its type species. *Myteroxis* is thus a junior objective synonym of *Mycetoporus*.

8. Strand (1935) argued that *Ischnosoma* Stephens became available only in 1832, not 1829. He further argued that *Ischnosoma* Stephens was a junior homonym of *Ischnosoma* Spix & Agassiz, 1829 (Osteichthyes). Based on these interpretations, Strand (1935, p. 293) proposed the new name *Ischnosomata* to replace the seemingly junior homonym. The fish name *Ischnosoma* is available (Article 11e) from Cuvier (1829 [before 31 March], p. 328), where '*Ischnosoma bicirrhosum*, Spix, xxv' was published in the synonymy of Cuvier's new species *Osteoglossum vandellii*. The name *Ischnosoma* appeared on Spix's plate (1829, pl. 25); Spix & Agassiz's work was published between 22 May and 4 July 1829 (see Kottelat, 1988, pp. 71, 72, 77 and BZN 46:

130 for the dates of publication). Agassiz (1829, p. 47) treated *Ischnosoma* as a junior synonym of *Osteoglossum*. Both names *Ischnosoma* and *Osteoglossum* were retained by Valenciennes (1847, pp. 287, 307), but *Ischnosoma* was later synonymized with *Osteoglossum* (Günther, 1868, p. 278). *Ischnosoma* has not been used since as a valid name in ichthyology. As stated in para. 1, the beetle name *Ischnosoma* Stephens was apparently published in June 1829. Since the date of the fish name is probably earlier I propose that all uses of *Ischnosoma* before Stephens (1829) should be suppressed.

9. Tottenham (1939) assumed that Westwood ([1838]) had proposed *T. splendidus* as the type species for both *Mycetoporus* and *Ischnosoma*, rendering the two names objective synonyms. He recognized that Thomson's (1859) designation of *T. punctus* as the type species of *Mycetoporus* was invalid. He proposed (1939, p. 226) the new name *Schinomosa* for the genus referred to by Thomson as *Mycetoporus* and designated *Tachyporus punctus* (Gyllenhal, 1810; that is, *Tachinus punctus* Gravenhorst, 1806) as its type species. This name has not been used except in later papers by Tottenham (1949, pp. 378, 423; 1956, p. 231), and Blackwelder (1952, p. 252) considered it to be a synonym of *Mycetoporus*.

10. Blackwelder (1952, p. 252), in his important work on the generic names of the family STAPHYLINIDAE, used the name *Mycetoporus* Mannerheim, 1831 for the genus, but did not recognize subgenera. He (1952, p. 204) followed Strand (1935) in assuming that the name *Ischnosoma* Stephens, 1829 was a junior homonym of *Ischnosoma* Spix, 1829.

11. A strict interpretation of the Code would necessitate using *Ischnosoma* Stephens, 1829 (type species *Tachinus splendidus* Gravenhorst, 1806 by Thomson's 1859 designation) as the name for the nominal genus, with *Mycetoporus* Mannerheim, 1831 treated as a junior objective synonym. The name *Schinomosa* Tottenham, 1939 (type species *Tachinus punctus* Gravenhorst, 1806; see para. 9) would replace the long established name *Mycetoporus* Mannerheim.

12. It is highly desirable to conserve the understood sense of both *Ischnosoma* Stephens, 1829 and *Mycetoporus* Mannerheim, 1831, as used in the taxonomic literature for over 130 years since Thomson (1859) adopted both names as valid. Over 150 species are placed in *Mycetoporus*, distributed primarily in the north temperate zone, but occurring in all major faunal regions except South America. *Ischnosoma* has been considered a subgenus of *Mycetoporus* by most modern authors (Lohse, 1964, p. 223; Tichomirova, 1973, pp. 147–148), but a revision of the North American species of the group (Campbell, in preparation) has shown that the two groups should be independently recognized at the generic level.

13. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers:

- (a) to suppress the generic name *Ischnosoma* Cuvier, 1829, and all uses of the name *Ischnosoma* prior to *Ischnosoma* Stephens, 1829, for the purposes of both the Principle of Priority and the Principle of Homonymy;
- (b) to set aside all fixations of type species for the nominal genus *Mycetoporus* Mannerheim, 1831 prior to the designation by Thomson (1859) of *Tachinus punctus* Gravenhorst, 1806;

(2) to place the following names on the Official List of Generic Names in Zoology:

- (a) *Mycetoporus* Mannerheim, 1831 (gender: masculine), type species by subsequent designation by Thomson (1859) *Tachinus punctus* Gravenhorst,

- 1806, as ruled in (1)(b) above, with the endorsement that it is to be given precedence over *Ischnosoma* Stephens, 1829 whenever the two names are considered to be synonyms;
- (b) *Ischnosoma* Stephens, 1829 (gender: neuter), type species by subsequent designation by Thomson (1859) *Tachinus splendidus* Gravenhorst, 1806, with the endorsement that it is not to be given priority over *Mycetoporus* Mannerheim, 1831 whenever the two names are considered to be synonyms;
- (3) to place the following names on the Official List of Specific Names in Zoology:
- (a) *punctus* Gravenhorst, 1806, as published in the binomen *Tachinus punctus* (specific name of the type species of *Mycetoporus* Mannerheim, 1831);
- (b) *splendidus* Gravenhorst, 1806, as published in the binomen *Tachinus splendidus* (specific name of the type species of *Ischnosoma* Stephens, 1829);
- (4) to place the following names on the Official Index of Rejected and Invalid Generic Names in Zoology:
- (a) *Ischnosoma* Cuvier, 1829 (Osteichthyes), as suppressed in (1)(a) above;
- (b) *Leichotes* Gistel, 1834 (a junior subjective synonym of *Ischnosoma* Stephens, 1829 and *Mycetoporus* Mannerheim, 1831);
- (c) *Myteroxis* Gozis, 1886 (a junior objective synonym of *Mycetoporus* Mannerheim, 1831);
- (d) *Ischnosomata* Strand, 1935 (a junior objective synonym of *Ischnosoma* Stephens, 1829);
- (e) *Schinomosa* Tottenham, 1939 (a junior objective synonym of *Mycetoporus* Mannerheim, 1831).

References

- Blackwelder, R.E.** 1952. The generic names of the beetle family Staphylinidae with an essay on genotypy. *Bulletin of the United States National Museum*, **200**: 1–483.
- Cuvier, G.** 1829. *Le règne animal distribué d'après son organisation pour servir de base à l'histoire naturelle des animaux et d'introduction à l'anatomie comparée*, Ed. 2, vol. 2. xvii, 406 pp. Déterville, Paris.
- Eichelbaum, F.** 1909. Katalog der Staphyliniden-Gattungen nebst Angabe ihrer Literatur, Synonyme, Artenzahl, geographischen Verbreitung und ihrer bekannten Larvenzustände. *Mémoires de la Société Entomologique de Belgique*, **17**: 71–280.
- Erichson, W.F.** 1839a. *Die Käfer der Mark Brandenburg*, vol. 1, part 2. Pp. 385–740. Morin, Berlin.
- Erichson, W.F.** 1839b. *Genera et species Staphylinorum, insectorum coleopterorum familiae*. Pp. 1–400, 5 pls. Morin, Berlin.
- Fletcher, D.S.** 1979. In Nye, I.W.B., *Generic names of moths of the world*, vol. 3 (Geometroidea). xx, 243 pp. British Museum (Natural History), London.
- Fowler, W.W.** 1888. *The Coleoptera of the British Islands*, vol. 2 (Staphylinidae). 444 pp., pls. 37–70. Reeve, London.
- Ganglbauer, L.** 1895. *Die Käfer von Mitteleuropa*, vol. 2 (Staphylinidea 1). 880 pp. Gerold's Sohn, Vienna.
- Gistel, J.** 1834. *Die Insecten-Doubletten aus der Sammlung des Herrn Grafen Rudolph von Jenison Walworth zu Regensburg*, No. 1 (Käfer). 35 pp. Jacquet, Munich.
- Gozis, M. des.** 1886. *Recherche de l'espèce typique de quelques anciens genres. Rectifications synonymiques et notes diverses*. 36 pp. Montluçon.
- Gravenhorst, J.L.C.** 1806. *Monographia coleopterorum micropterorum*. xvi, 236 pp. Gottingae.
- Günther, A.** 1868. *Catalogue of the fishes in the British Museum*, vol. 7. xx, 512 pp. British Museum, London.

- Gyllenhal, L. 1810. *Insecta Svecica. Classis 1 (Coleoptera sive Eleuterata)*, vol. 1, part 2. 660 pp. Leverentz, Scaris.
- Hatch, M.H. 1957. The beetles of the Pacific Northwest, part 2 (Staphyliniformia). *University of Washington Publications in Biology*, 16: 1–384.
- Heer, O. 1839. *Fauna Coleopterorum Helvetica*, part 1, fasc. 2. Pp. 145–360. Orelli, Fuesslini & Socorum, Turici.
- Horn, G.H. 1877. Synopsis of the genera and species of the Staphylinidae tribe Tachyporini of the United States. *Transactions of the American Entomological Society*, 6: 81–128.
- Jacquelin du Val, P.N.C. 1856. *Genera des coléoptères d'Europe...*, vol. 2. Pp. 1–32. Deyrolle, Paris.
- Kraatz, G. 1857. *Naturgeschichte der Insecten Deutschlands*, Abt. 1 (Coleoptera), vol. 2 (Staphylinii). Pp. 377–1080. Nicolaischen, Berlin.
- Kottelat, M. 1988. Authorship, dates of publication, status and types of Spix and Agassiz's Brazilian fishes. *Spixiana*, 11(1): 69–93.
- Lacordaire, T. 1854. *Histoire naturelle des insectes. Genera des coléoptères*, vol. 2. 548 pp. Libraire Encyclopédique de Roret, Paris.
- Lohse, G.A. 1964. P. 264 in Freude, H., Harde, K.W. & Lohse, G.A. *Die Käfer Mitteleuropas*, vol. 4 (Fam. Staphylinidae). 264 pp. Goecke & Evers, Krefeld.
- Luze, G. 1901. Bolitobiini. Revision der paläarktischen Arten der Staphyliniden-Gattungen *Bryocharis* Boisd. et Lac., *Bolitobius* Mannh., *Bryoporus* Kraatz und *Mycetoporus* Mannh. *Verhandlungen der K.K. Zoologisch-Botanischen Gesellschaft in Wien*, 51(9): 662–746.
- Mäklin, F.G. [1847]. *Ad Cognitionem specierum Fennicarum generis Mycetopori Symbolae ... Helsingforsiae*. 16 pp. Helsingfors.
- Mannerheim, C.G. von. 1831. Précis d'un nouvel arrangement de la famille des Brachélytres de l'ordre des insectes coléoptères. *Mémoires présentés à l'Académie Impériale des Sciences de St.-Petersbourg par Divers Savans, et lus dans ses Assemblées*, 1(5): 415–501.
- Marshall, T. 1802. *Coleoptera Britannicae, sistens insecta Coleoptera Britanniae indigena secundum methodum linnaeanam disposita*, vol. 2. Pp. 235–548. White, London.
- Neave, S.A. 1940. *Nomenclator Zoologicus*, vol. 3 (M-P). 1065 pp. Zoological Society of London, London.
- Redtenbacher, L. 1849. *Fauna Austriaca. Die Käfer, nach der analytischen Methode bearbeitet*. xxvii, 883 pp. Gerold, Vienna.
- Redtenbacher, L. 1858. *Fauna Austriaca: Die Käfer, nach der analytischen Methode bearbeitet*. Ed. 2. cxxxvi, 1017 pp., 2 pls. Gerold's Sohn, Vienna.
- Reitter, E. 1909. *Fauna Germanica. Die Käfer des Deutschen Reiches*, vol. 2. 392 pp., pls 41–80. Lutz, Stuttgart.
- Rey, C. 1883. Tribu des Brévipennes. Deuxième rameau. Bolitobiates. *Annales de la Société Linnéenne de Lyon*, (2)29: 13–125, 125/1–7.
- Sahlberg, J. 1876. *Enumeratio Coleopterorum Brachelytrorum Fenniae*, 1 (Staphylinidae). 247 pp. Societas pro Faunas et Flora Fennica, Helsingfors.
- Sherborn, C.D. 1928. *Index Animalium ...*, part 17 (MUNDA-NYX). Pp. 4195–4450. British Museum, London.
- Spix, J.B. de & Agassiz, L. 1829–1831. *Selecta genera et species piscium quos in itinere per Brasiliam ... Collegit et pingendos curavit Dr J.B. de Spix, ... Digessit, descripsit et observationibus anatomicis illustravit Dr L. Agassiz*. xvi, ii, 138 pp., 98 pls. Wolf, Monachii.
- Stephens, J.F. 1829a. *The nomenclature of British insects; being a compendious list of such species as are contained in the Systematic Catalogue of British Insects, and forming a guide to their classification, & c. & c.* 68 pp. Baldwin & Cradock, London.
- Stephens, J.F. 1829b. *A systematic catalogue of British insects*, part 1. xxxiv, 416 pp. Baldwin & Cradock, London.
- Stephens, J.F. 1832. *Ischnosoma*. Pp. 168–171 in: *Illustrations of British entomology...* Mandibulata, vol. 5. Baldwin & Cradock, London.
- Stephens, J.F. 1833. *The nomenclature of British insects together with their synonymes; being a compendious list of such species as are contained in the systematic catalogue of British insects, and of those discovered subsequently to its publication; forming a guide to their classification*, part 1. 135 columns. Baldwin & Cradock, London.

- Stephens, J.F.** 1835. Appendix. Pp. 365–440 in: *Illustrations of British entomology.... Mandibulata*, vol. 5. Baldwin & Cradock, London.
- Strand, E.** 1935. Revision von Gattungsnamen palaearktischer Coleoptera. *Folia Zoologica Hydrobiologica*, 7(2): 282–299.
- Thomson, C.G.** 1859. *Skandinaviens Coleoptera, synoptiskt bearbetade*, vol. 1. 304 pp. Lund.
- Tikhomirova, A.L.** 1973. *Morfoekologicheskiye osobennosti i filogenez stafilinid (s katalogom fauny S.S.S.R.) [Morphological and ecological features and phylogeny of the Staphylinidae (with a catalogue of the fauna of the U.S.S.R.)]*. 190 pp. Academy of Sciences, U.S.S.R., A.N. Severtsov Institute of Evolutionary Morphology and Ecology of Animals, Moscow. [In Russian.]
- Tottenham, C.E.** 1939. Some notes on the nomenclature of the Staphylinidae (Coleoptera), part 2. *Proceedings of the Royal Entomological Society of London*, (B)8(12): 227–237.
- Tottenham, C.E.** 1949. The generic names of the British Staphylinidae with a check list of the species. Pp. 343–466 in: *The generic names of British insects....*, vol. 1 (1934–1939), part 9. Royal Entomological Society, London.
- Tottenham, C.E.** 1956. Contributions à l'étude de la faune entomologique du Ruanda-Urundi (Mission P. Basilewsky 1953). 87 (Coleoptera Staphylinidae: Steninae, Xantholininae, Staphylininae, Tachyporinae et Pygosteninae). *Annales du Musée Royal du Congo Belge, Sciences Zoologiques*, 51: 221–332.
- Valenciennes, A.** 1847. In Cuvier, G.L.C.F.D. & Valenciennes, A., *Histoire naturelle des poissons*, vol. 19. xix, 544 pp. Bertrand, Paris.
- Westwood, J.O.** [1838]. *Synopsis of the genera of British insects*, pp. 17–32. Published with *An introduction to the modern classification of insects ...*, vol. 1, part 3. Pp. 113–160. Longman, Orme, Brown, Green & Longmans, London.

Case 2760

***Rhipidocystis* Jaekel, 1901 (Echinodermata, Eocrinoidea): proposed designation of *R. baltica* Jaekel, 1901 as the type species**

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Abstract. The purpose of this application is to conserve the Ordovician eocrinoid name *Rhipidocystis* Jaekel, 1901 in its accustomed usage. In 1913 Bather designated *R. gigas* Jaekel, 1901 as the type species. However, this nominal species was composite and Hecker [Gekker] (1940) invalidly designated *R. baltica* Jaekel, 1901 as the type species. It is proposed that Bather's designation of *R. gigas* be set aside, thereby validating Hecker's designation of *R. baltica* and conserving *Rhipidocystis* in its accustomed usage.

1. In a paper published early in 1901, although date-marked 1900, Jaekel established the genus *Rhipidocystis* (p. 672) with two new species, *R. baltica* and *R. gigas*, neither of which was given as the type species. *R. baltica* was named in the description of text-fig. 3 (p. 665) which Jaekel thought to be a stem appendage; this is the only text-figure relevant to *Rhipidocystis*. The second species, *R. gigas*, was briefly described in the text (p. 672).

2. Bather (1913, p. 371) examined the original specimens which Jaekel had attributed to *Rhipidocystis gigas* and which had been collected from several different localities. Bather had some doubts whether they all belonged to *R. gigas* ('I do not know on what evidence Specimen 4 is placed in the same species, or indeed in the same genus as the others; but I assume that material evidence does, or did, exist'). He thought that *R. baltica* was probably conspecific with *R. gigas* and (p. 369) designated *R. gigas* as the type species of *Rhipidocystis*. Hecker (1940, p. 16), without mentioning Bather's designation of a type species, designated *R. baltica*. In the *Treatise on Invertebrate Paleontology*, Ubaghs (1968, p. S489) accepted Bather's designation of *R. gigas* as the type species. Bockelie (1981, pp. 141, 146) also accepted Bather's designation.

3. Hecker [Gekker] (1938, p. 421) demonstrated that Jaekel's genus *Rhipidocystis* was composite, being based on parts from four different genera:

- (a) The 'thecae' consisted of fragments of the ophiocistoid *Volchovia* Hecker, 1938 and thecae of the eocrinoid *Bockia* Hecker, 1938.
- (b) The 'stem joints' belonged to the solute *Dendrocystites kuckersianus* Hecker, 1938, transferred by Gill & Caster (1960, p. 16) to their new genus *Heckericystis*.
- (c) The 'root bladders' (Wurzelblasen) were representatives of *Bockia*.
- (d) The 'stem appendages' (Stielanhänge) on which *R. baltica* Jaekel was based were eocrinoid, and Hecker restricted *Rhipidocystis* to this sense.

4. If the nominal species *R. gigas* were to remain as the type species of *Rhipidocystis*, the concept of the four genera *Rhipidocystis*, *Volchovia*, *Heckericystis* and *Bockia*

would change from the present. The alternative, which I favour, would be to set aside Bather's designation of *R. gigas* as the type species of *Rhipidocystis* and to accept Hecker's (1940) designation of *R. baltica*.

5. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to set aside all fixations of type species for the nominal genus *Rhipidocystis* Jaekel, 1901 prior to that by Hecker (1940) of *Rhipidocystis baltica* Jaekel, 1901;
- (2) to place on the Official List of Generic Names in Zoology the name *Rhipidocystis* Jaekel, 1901 (gender: feminine), type species by subsequent designation by Hecker (1940) *Rhipidocystis baltica* Jaekel, 1901;
- (3) to place on the Official List of Specific Names in Zoology the name *baltica* Jaekel, 1901, as published in the binomen *Rhipidocystis baltica* (specific name of the type species of *Rhipidocystis* Jaekel, 1901).

Acknowledgements

I am sincerely grateful to Prof R.Th. Hecker, Prof G. Ubaghs and Dr G. Sprinkle for discussion of this case, and for Dr Sprinkle's help in improving the English of the application.

References

- Bather, F.A. 1913. Caradocian Cystidea from Girvan. *Transactions of the Royal Society of Edinburgh*, **49**(6): 359–529.
- Bockelie, J.F. 1981. The Middle Ordovician of the Oslo Region, Norway, 30. The eocrinoid genera *Cryptocrinites*, *Rhipidocystis* and *Bockia*. *Norsk Geologisk Tidsskrift*, **61**: 123–147.
- Hecker [Gekker], R.Th. 1938. New data on *Rhipidocystis* Jkl (Order Digitata n.o., Class Carpoidea Jkl) and on a new genus *Bockia* (Subclass Eocrinoidea Jkl, Class Crinoidea Mill.) from the Ordovician of Leningrad Province, U.S.S.R., and Estonia. *Compte Rendu [Doklady] Académie des Sciences de l'U.R.S.S.*, (2)**19**(5): 421–425. [In Russian.]
- Hecker [Gekker], R.Th. 1940. Carpoidea, Eocrinoidea and Ophiocistia from the Ordovician of Leningrad region and Estonia. *Académie des Sciences de l'U.R.S.S. [Trudy] de l'Institut Paléontologique*, **9**(4): 5–82. [In Russian.]
- Gill, E.D. & Caster, K.E. 1960. Carpoide echinoderms from the Silurian and Devonian of Australia. *Bulletin of American Paleontology*, No. 185, **41**: 1–71.
- Jaekel, O. 1901. Ueber Carpoideen, eine neue Classe von Pelmatozoen. *Zeitschrift der Deutschen geologischen Gesellschaft*, **52**(4): 661–677.
- Ubaghs, G. 1968. Eocrinoidea. Pp. 455–495 in Moore, R.C. (Ed.), *Treatise on Invertebrate Paleontology*, part S, Echinodermata 1, vol. 2. Geological Society of America and University of Kansas, Lawrence, Kansas.

Case 2815***Graptolithus clintonensis* (currently *Monograptus clintonensis*; Graptolithina): proposed attribution to Hall, 1852, and designation of a lectotype**

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Abstract. The purpose of this application is to conserve in its accepted usage the specific name of the Silurian graptolite *Monograptus clintonensis*. In 1843 Hall established the nominal species *clintonensis* but figured a specimen of *Monograptus priodon* (Bronn, 1835). Hall later (1852) described the diagnostic characters of *clintonensis* and figured specimens agreeing with those characters. It is proposed that the nominal species *clintonensis* be attributed to Hall, 1852, and that one of the specimens figured in his 1852 paper be designated the lectotype.

1. Hall (1843, pp. 74–75, fig. 12 on p. 72) described *Graptolites clintonensis* from the 'upper green shale at Sodus, Williamson, Rochester, and numerous intermediate points' in New York State, and indicated that the new specific name referred to his figured specimen. His brief description could apply to any monograptid with hooked thecae. His figured specimen, housed in the American Museum of Natural History, New York (specimen no. 30956), is from Shaker's Mill, Sodus, Wayne County, New York. I have examined this specimen, which is an example of *Monograptus priodon* (Bronn, 1835) (p. 56).

2. Hall later (1852, p. 39) described and figured further specimens which he described as *Graptolithus clintonensis* from Sodus, Williamson and Rochester. His diagnosis for the species stated 'serrae long, deeply cut into the stipe'. This feature is not characteristic of *M. priodon*, the thecae ('serrae') of which overlap for one-half or more of their length distally and the metathecal hooks of which comprise less than half of the dorso-ventral width of the rhabdosome, the prothecae being approximately parallel to the rhabdosome axis. Hall (1852, p. 39) noted that one of the 'distinctive characters' of the thecae ('serrae') of *Graptolithus clintonensis* was 'the depth to which they are cut into the stipe'. Hall (1852, pl. A17, figs. 1a–h) figured five specimens which are housed in the American Museum of Natural History (specimen nos. 30951–30952, 30954–30956). I have examined these specimens, which are of two species. Distal fragments of *M. priodon* are figured in figs. 1b (specimen no. 30956, which is the specimen figured in 1843), 1c (specimen no. 30952) and 1g–h (stated in the records of the American Museum of Natural History to be specimen no. 30955 — if so, the figures are not accurate representations of the specimen). The specimens figured in fig. 1a (specimen no. 30951) and figs. 1d–f (specimen no. 30954) are of a different species and match precisely, in terms of thecal morphology, Hall's 1852 description of *Graptolithus clintonensis*.

3. Lapworth (1880, p. 69) discussed the species and stated: 'As regards *M. clintonensis*, Hall, the differences [from *M. priodon*] are so marked that the question of identity may soon be disposed of'. He noted that the distal thecae of what he considered to be *M. clintonensis* were 'wholly destitute of anything like overlap'.

4. Ruedemann (1908, pp. 450–453, text figs. 427–431, pl. 29, fig. 1) described new material of *M. clintonensis* from New York. His description combined features which agreed with Hall's 1852 description of *M. clintonensis* (proximally) and those of *M. priodon* (distally). I have examined Ruedemann's figured material which is housed in the New York State Museum, Albany (specimen nos. 7309–7313). Specimen no. 7309 (text fig. 427) is a distal fragment of *M. priodon*. The other specimens agree with Hall's 1852 description of *M. clintonensis*. These include specimen no. 7313 (pl. 29, fig. 1) which Ruedemann described as a typical specimen. Ruedemann later (1947, pl. 85) used copies of his 1908 figures to illustrate *M. clintonensis*. He again described specimen no. 7313 (pl. 85, fig. 48) as a typical specimen.

5. To summarise, the specific name *clintonensis* has been used for two species. The specimens figured by Hall (1852) in pl. A17, figs. 1a and 1d–f and the specimen figured by Ruedemann (1908, 1947) as a 'typical specimen' agree with Hall's 1852 description of *clintonensis*. Some distal fragments (including that figured by Hall, 1843, fig. 12) are specimens of *M. priodon*. *Monograptus clintonensis* has not been recorded from outside North America. However, I have recently found this distinctive species in collections I have made in Wales, suggesting that it may be of value in international correlation.

6. It is desirable that Hall's specific name *clintonensis* should be retained for those specimens which agree with his 1852 description of the species. I therefore propose that the specific name *clintonensis* be attributed to Hall, 1852. Subject to acceptance of this proposal, I designate as lectotype the specimen figured by Hall, 1852, pl. A17, fig. 1a, which is the longest of his figured specimens. This is specimen no. 30951 in the American Museum of Natural History, New York; it is from Shaker's Mill, Sodus, Wayne County, New York.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to suppress the specific name *clintonensis* Hall, 1843, as published in the binomen *Graptolites clintonensis*, and all uses of that name prior to the publication of *Graptolithus clintonensis* Hall, 1852, for the purposes of both the Principle of Priority and the Principle of Homonymy;
- (2) to place on the Official List of Specific Names in Zoology the name *clintonensis* Hall, 1852, as published in the binomen *Graptolithus clintonensis* and as defined by the lectotype designated in para. 6 above;
- (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *clintonensis* Hall, 1843, as published in the binomen *Graptolites clintonensis* and as suppressed in (1) above.

References

- Hall, J. 1843. *Geology of New York. Part IV. Survey of the Fourth Geological District*. 683 pp. Albany.
- Hall, J. 1852. *Palaeontology of New York. Volume II, containing descriptions of the organic remains of the Lower Middle Division of the New York System*. 362 pp. Albany.

- Lapworth, C.** 1880. On Linnarsson's recent discoveries in Swedish geology. (Part II). *Geological Magazine*, (2)7: 68-71.
- Ruedemann, R.** 1908. Graptolites of New York. Part 2. Graptolites of the higher beds. *New York State Museum Memoir*, 11: 1-583.
- Ruedemann, R.** 1947. Graptolites of North America. *Geological Society of America Memoir*, 19: 1-652.

Case 2826***Monograptus crenulatus* (currently *Monoclimacis crenulata*; Graptolithina): proposed attribution of the specific name to Elles & Wood, 1911, and proposed designation of a lectotype**

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Abstract. The purpose of this application is to conserve in its accepted usage the specific name of the Silurian graptolite *Monograptus crenulatus*. Törnquist (1881) established the nominal species *crenulatus* and Elles & Wood (1911) used his name for specimens from Wales which have since been shown to be non-conspecific with Törnquist's species, which is a synonym of *Monograptus vomerinus vomerinus* (Nicholson, 1872). *Monograptus crenulatus* sensu Elles & Wood gives its name to the important *Monoclimacis crenulatus* Biozone. It is proposed that the nominal species *crenulatus* be attributed to Elles & Wood, 1911, and that one of the specimens figured by them be designated lectotype.

1. Törnquist (1881, pp. 438, pl. 17, figs. 4a–d) described a new species *Monograptus crenulatus* from the 'retiolitesskiffern' (Silurian) of Nitsjö and Stygforsen, Sweden.

2. Wood (1906, p. 657) erected the *Monograptus crenulatus* Biozone, the type locality being the Trannon River section in Wales.

3. Elles & Wood (1911, pp. 412–413, text figs. 278a–e, pl. 41, figs. 4a–d) in their *Monograph of British Graptolites* described and figured specimens which they named *Monograptus vomerinus* (Nicholson, 1872) var. *crenulatus* (Törnquist). All the specimens figured, except that figured as pl. 41, fig. 4d, were from Wood's (1906) collections from the Trannon district. This monograph, published between 1901 and 1918, became the standard guide for graptolite identification for the 50 years subsequent to its publication and is still widely used.

4. Prior to 1970 Elles & Wood's specimens of *Monograptus crenulatus* had been universally accepted as specimens of *M. crenulatus* Törnquist. References to *M. crenulatus* during this period are based on Elles & Wood's (1911) description (e.g.

Pribyl, 1940, pp. 7–8, pl. 2, figs. 17–18; Waterlot, 1945, p. 76, fig. 323 (pars); Münch, 1952, p. 120, pl. 38, figs. 6a–b; Romariz, 1962, pp. 264–265, pl. 13, fig. 19).

5. In 1970 Rickards (p. 177) questioned the validity of Törnquist's species *Monoclimacis crenulata*, and referred to *Monoclimacis crenulata* sensu Elles & Wood. Bjerreskov (1975, pp. 56–57) measured specimens of *Monograptus crenulatus* Törnquist from the type areas of Nittsjö and Stygforsen. She concluded: 'These specimens have measurements so close to those of *Monograptus vomerinus vomerinus* and a revision will probably show that they have to be included in this species. However, *M. crenulatus* sensu Elles & Wood is quite different from *M. vomerinus vomerinus*, and this form should be maintained as a separate species or subspecies'.

6. Examination by one of us (D.K.L.) of the type material of *Monoclimacis crenulata* (Törnquist) and of the neotype of *Monoclimacis vomerina vomerina* confirms that, contrary to Elles & Wood's thinking, the two are conspecific. This neotype was selected by Strachan (1971, p. 65) as BU 1542, housed in the Lapworth Museum of Birmingham University, and figured by Elles & Wood (1911, pl. 41, fig. 1a); it is from the Riccarton Beds of Elliottsfield, S. Scotland.

7. *Monoclimacis crenulata* (sensu Elles & Wood) has been used widely as an indicator of the *Monoclimacis crenulata* Biozone. Rickards (1976, p. 166) noted that the recognition of the *M. crenulata* Biozone was based largely on the occurrence of *M. crenulata* (sensu Elles & Wood). Cocks et al. (1984, p. 173, fig. 69) included the *M. crenulata* Biozone as part of the 'standard scale of graptolite zones' in their paper *The Llandovery Series of the Type Area*. Rickards (1989, p. 269, fig. 169), in *A global standard for the Silurian System*, included the *Monoclimacis crenulata* Biozone in his table of biozones 'most widely in use in international correlation'.

8. It is desirable to retain the accepted usage of the species *Monoclimacis crenulata* and of the *Monoclimacis crenulata* Biozone. We therefore propose that the specific name *crenulata* be attributed to Elles & Wood (1911) and not to Törnquist (1881). Subject to acceptance of this proposal, we select the specimen figured by Elles & Wood (1911) as text fig. 278a as the lectotype of *Monograptus crenulatus* Elles & Wood, 1911. This specimen, from Wood's (1906) collection of graptolites from the Trannon area, is housed in Birmingham University, where it is registered as BU 1555 (see Strachan, 1971, p. 108).

9. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to suppress the specific name *crenulatus* Törnquist, 1881, as published in the binomen *Monograptus crenulatus*, and all uses of that name prior to its publication by Elles & Wood (1911), for the purposes of both the Principle of Priority and the Principle of Homonymy;
- (2) to place on the Official List of Specific Names in Zoology the name *crenulatus* Elles & Wood, 1911, as published in the trinomen *Monograptus vomerinus crenulatus* and as defined by the lectotype designated in para. 8 above;
- (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *crenulatus* Törnquist, 1881, as published in the binomen *Monograptus crenulatus* and as suppressed in (1) above.

References

- Bjerreskov, M. 1975. Llandoveryan and Wenlockian graptolites from Bornholm. *Fossils and Strata*, 8: 1–94.

- Cocks, L.R.M., Woodcock, N.H., Rickards, R.B., Temple, J.T. & Lane, P.D. 1984. The Llandovery Series of the Type Area. *Bulletin of the British Museum (Natural History), Geology*, **38**: 131–182.
- Elles, G.L. & Wood, E.M.R. 1911. A monograph of British graptolites. Part 8. *Palaeontographical Society (Monograph)*, 359–414.
- Münch, A. 1952. Die Graptolithen aus dem anstehenden Gotlandium Deutschlands und der Tschechoslowakei. *Geologica*, **7**: 1–157.
- Příbyl, A. 1940. Revise českých graptolitů rodu *Monoclimacis*, Frech. *Rozpravy II. Třidy České Akademie*, **50**: 1–19.
- Rickards, R.B. 1970. In Burgess, I.C., Rickards, R.B. & Strachan, I. The Silurian strata of the Cross Fell area. *Bulletin of the Geological Survey of Great Britain*, **32**: 167–182.
- Rickards, R.B. 1976. The sequence of Silurian graptolite zones in the British Isles. *Geological Journal*, **11**: 153–188.
- Rickards, R.B. 1989. Exploitation of graptoloid cladogenesis in Silurian stratigraphy. Pp. 267–274 in Holland, C.H. & Bassett, M.G. (Eds.). *A global standard for the Silurian System*. National Museum of Wales, Geological Series, No. 9. 325 pp. Cardiff.
- Romariz, C. 1962. Graptolitos do Silúrico Português. *Revista da Faculdade de Ciências de Lisboa, (C)***10**: 114–305.
- Strachan, I. 1971. A synoptic supplement to 'A monograph of British graptolites by Miss G.L. Elles and Miss E.M.R. Wood'. *Palaeontographical Society (Monograph)*, 1–130.
- Törnquist, S.L. 1881. Om några graptolitarter från Dalarne. *Geologiska Föreningens i Stockholm Förhandlingar*, **5**: 434–445.
- Waterlot, G. 1945. Les graptolites du Maroc. *Notes et Mémoires, Protectorat de la République Française au Maroc. Division des Mines et de la Géologie, Service Géologique*, **63**: 1–112.
- Wood, E.M.R. 1906. The Tarannon Series of Tarannon. *Quarterly Journal of the Geological Society of London*, **62**: 644–701.

Case 2797

***Scylliorhinus atlanticus* Koefoed, 1927 (currently *Apristurus atlanticus*; Chondrichthyes, Carcharhiniformes): proposed conservation of the specific name**

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Abstract. The purpose of this application is to conserve the specific name of *Apristurus atlanticus* (Koefoed, 1927), which is currently in use for an Atlantic scylliorhinid (catshark). The name is threatened by the unused senior synonym *Scyllium? spinacipellitum* Vaillant, 1888.

1. Vaillant (1888, p. 60, pl. 1, figs. 3, 3a and 4) described two species of scylliorhinid sharks, *Scyllium? spinacipellitum* and *S. acutidens*, from deep waters off the Canary Islands. The types of these two species (MNHN 1884-384 and MNHN 1884-385) are preserved in the collection of the Muséum National d'Histoire Naturelle, Paris. Close examination of the type specimen (MNHN 1884-384) of *S. spinacipellitum* caused us (Nakaya & Séret, 1989, p. 977) to synonymize Vaillant's species with *Scylliorhinus atlanticus* Koefoed, 1927 (p. 18). It may be noted in passing that *Scylliorhinus* is an old unjustified emendation of *Scylliorhinus* Blainville, 1816.

2. The specific name *spinacipellitum* has never been used as a valid name since 1888. Bertin (1939, p. 68, footnote 1) mentioned the name in a catalogue of the type specimens in the Muséum National d'Histoire Naturelle. Fowler (1967, p. 356) doubtfully included *S. spinacipellitum* in the synonymy of *Scylliorhinus canicula* (Linnaeus, 1758), and that synonymy was followed by Compagno (1984, p. 358; 1988, p. 122). We have been unable to find any other mention of the name *spinacipellitum*.

3. The name *Apristurus atlanticus* (Koefoed, 1927) has been used in such taxonomic works as Bigelow & Schroeder (1944, p. 22; 1948, p. 220), Bigelow, Schroeder & Springer (1953, p. 217), Cadenat & Maul (1966, p. 778), Springer (1966, p. 613; 1979, p. 14), Taylor (1972, p. 71), Nakaya (1975, p. 23), Cadenat & Blache (1981, p. 185), Compagno (1984, p. 261; 1988, p. 168), Gubanov, Kondurin & Myagkov (1986, p. 92) and also in popular books such as Ellis (1983), Reader's Digest (1986) and Springer & Gold (1989). Hence the name *A. atlanticus* is commonly used whereas *S. spinacipellitum* has almost never been mentioned. Use of the name *S. spinacipellitum* would cause confusion and disturb the stability of nomenclature for this species.

4. The International Commission on Zoological Nomenclature is accordingly asked:
 - (1) to use its plenary powers to suppress the specific name *spinacipellitum* Vaillant, 1888, as published in the binomen *Scyllium? spinacipellitum*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
 - (2) to place on the Official List of Specific Names in Zoology the name *atlanticus* Koefoed, 1927, as published in the binomen *Scylliorhinus atlanticus*;
 - (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *spinacipellitum* Vaillant, 1888, as published in the binomen *Scyllium? spinacipellitum* and as suppressed in (1) above.

References

- Bertin, L. 1939. Catalogue des types de poissons du Muséum National d'Histoire Naturelle. Cyclostomes et Sélaciens. *Bulletin du Muséum National d'Histoire Naturelle*, (2)11(1): 51–98.
- Bigelow, H.B. & Schroeder, W.C. 1944. New sharks from the western North Atlantic. *Proceedings of the New England Zoological Club*, 23: 21–36.
- Bigelow, H.B. & Schroeder, W.C. 1948. Sharks. Pp. 59–576 in Tee-Van, J., Breder, C.M., Hildebrand, S.F., Parr, A.E. & Schroeder, W.C. (Eds.), *Fishes of the western North Atlantic*, no. 1, part 1. 517 pp. Memoirs of the Sears Foundation for Marine Research, Yale University, New Haven.
- Bigelow, H.B., Schroeder, W.C. & Springer, S. 1953. New and little known sharks from the Atlantic and from the Gulf of Mexico. *Bulletin of the Museum of Comparative Zoology at Harvard College*, 109(3): 213–276.
- Cadenat, J. & Blache, J. 1981. Requins de Méditerranée et d'Atlantique (plus particulièrement de la côte occidentale d'Afrique). *Faune Tropicale*, 21: 1–330.
- Cadenat, J. & Maul, G.E. 1966. Note d'ichtyologie ouest-africaine. 43. Description d'une espèce nouvelle du genre *Apristurus*, *Apristurus maderensis* (Sélaciens, Scyliorhinidae). *Bulletin de l'Institut Fondamental d'Afrique Noire*, (A)28(2): 769–782.
- Compagno, L.J.V. 1984. Sharks of the world. *FAO species catalogue*, vol. 4, part 1. (FAO Fisheries Synopsis no. 125), 655 pp. Food and Agriculture Organization of the United Nations, Rome.
- Compagno, L.J.V. 1988. *Sharks of the Order Carcharhiniformes*. 486 pp. Princeton University Press, Princeton.
- Ellis, R. 1983. *The book of sharks*. 256 pp., 20 pls. Robert Hale, London.
- Fowler, H.W. 1967. A catalogue of world fishes (7). *Quarterly Journal of Taiwan Museum*, 20(3–4): 341–366.
- Gubanov, E.P., Kondurin, V.V. & Myagkov, N.A. 1986. *Sharks of the world oceans*. 272 pp. Agropromizdat, Moscow. [In Russian].
- Koefoed, E. 1927. Fishes from the sea bottom. *Report of the Scientific Results of Michael Sars North Atlantic Deepsea Expedition 1910*, 4(1): 1–148.
- Nakaya, K. 1975. Taxonomy, comparative anatomy and phylogeny of Japanese catsharks, Scyliorhinidae. *Memoir of Faculty of Fisheries, Hokkaido University*, 23(1): 1–94.
- Nakaya, K. & Séret, B. 1989. *Scyllium spinacipellitum* Vaillant, 1888, a senior synonym of *Apristurus atlanticus* (Koefoed, 1927) (Chondrichthyes, Scyliorhinidae). *Bulletin du Muséum National d'Histoire Naturelle*, (4)11(A,4): 977–982.
- Reader's Digest. 1986. *Sharks. Silent hunters of the deep*. 208 pp. Reader's Digest Services, New South Wales.
- Springer, S. 1966. A review of western Atlantic cat sharks, Scyliorhinidae, with descriptions of a new genus and five new species. *Fishery Bulletin of the U.S. Fish and Wildlife Service*, 65: 581–624.
- Springer, S. 1979. A revision of the catshark, Scyliorhinidae. *National Oceanic and Atmospheric Administration, U.S. Department of Commerce Technical Report, National Marine Fisheries Service, Circular*, no. 422. 152 pp.

- Springer, V.G. & Gold, J.P.** 1989. *Sharks in question. The Smithsonian answer book*. 187 pp. Smithsonian Institution Press, Washington, D.C.
- Taylor, L.R., Jr.** 1972. *Apristurus kampae*, a new species of scyliorhinid shark from the eastern Pacific Ocean. *Copeia*, **1972**(1): 71-78.
- Vaillant, L.** 1888. Poissons. In Masson, G. (Ed.), *Expéditions scientifiques du Travailleur et du Talisman pendant les années 1880-83*. 406 pp., 25 pls. Paris.

Case 2807***Dinodontosaurus* Romer, 1943 (Reptilia, Synapsida): proposed conservation**

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Abstract. The purpose of this application is to conserve the Triassic dicynodont name *Dinodontosaurus* Romer, 1943 by suppression of the virtually unused senior subjective synonym *Diodontosaurus* Caldas, 1936.

1. Huene (1935, p. 76) established a new species of the genus *Dicynodon* Owen, 1845, *D. turpior*, for a partial skeleton of a dicynodont reptile from Triassic strata near Chiniqua, Rio-Grande-do-Sul, Brazil.

2. Caldas (1936, p. 249) established the new genus and species *Diodontosaurus pedroanum* for the skull of a dicynodont reptile collected from the same strata as Huene's near São-Pedro, Rio-Grande-do-Sul, Brazil. Caldas described and illustrated the holotype skull of *Diodontosaurus pedroanum* and made it clear that he was naming a new taxon which he contrasted with two other dicynodont taxa. Under Article 13 of the Code, this is fully adequate to make *Diodontosaurus pedroanum* an available name. *Diodontosaurus pedroanum* is the type species of *Diodontosaurus* by monotypy. The holotype skull of *D. pedroanum* is extant and is registered as DGM no. 530R (Divisão de Geologia e Mineralogia, Ministerio das Minas e Energia, Rio de Janeiro, Brazil). It has been illustrated by Beltrão (1966, fig. 34) and Cox (1968, figs. 5E, 8E).

3. Romer (1943, p. 336) established the new genus and species *Dinodontosaurus oliveirai* for a dicynodont skeleton from the same Triassic strata in the same general area from which Huene's and Caldas's specimens were derived.

4. Cox (1965, pp. 475–476) transferred *Dicynodon turpior* to *Dinodontosaurus* Romer, thus creating the new combination *Dinodontosaurus turpior* (Huene, 1935). He also considered *Dinodontosaurus oliveirai* to be a junior subjective synonym of *Dinodontosaurus turpior*. Cox stated that the type species of *Dinodontosaurus* was *D. turpior*. This is incorrect in that, in accordance with Articles 67 and 68, the type species is *D. oliveirai*, which is a junior subjective synonym of *D. turpior*.

5. Cox (1968, p. 9) acknowledged the existence of the name *Diodontosaurus pedroanum* Caldas, and considered its holotype to be a specimen of *Dinodontosaurus turpior*. He asserted that 'Tupi Caldas's description is so brief and so poorly illustrated that it cannot be regarded as a satisfactory basis for the identification of a new taxon, and *Dinodontosaurus* [sic] *pedroanum* must therefore be regarded as a nomen nudum'. King (1988, pp. 105–106) followed Cox in listing '*Diodontosaurus* Tupi Caldas, 1936 nomen nudum' as a subjective synonym of *Dinodontosaurus* Romer, 1943 and '*Diodontosaurus pedroanum* Tupi Caldas, 1936 nomen nudum' as a subjective synonym of *Dinodontosaurus turpior* (Huene, 1935). Mones (1986, p. 71), however, listed

Diodontosaurus and *Diodontosaurus pedroanum* as names distinct from *Dinodontosaurus* and *Dinodontosaurus turpior*.

6. *Dinodontosaurus* Romer, 1943 and *turpior* Huene, 1935 are widely recognized as the valid names for the Brazilian Triassic dicynodont described by Huene (1935), Caldas (1936) and Romer (1943). These names have been used in lists and research papers by, for example, Anderson & Cruickshank (1978, p. 35), Barberena, Araujo & Lavina (1985, p. 14) and Ochev & Shishkin (1989, p. 163); a representative list of 17 further papers is held by the Commission Secretariat. *Dinodontosaurus* has given its name to the subfamily DINODONTOSAURINAE Keyser & Cruickshank, 1979. I am not aware of the use of the name *Diodontosaurus* in publications other than those cited in paras. 2 and 5 above.

7. Strict application of the Principle of Priority would recognize *Diodontosaurus pedroanum* Caldas, 1936 as a senior subjective synonym of *Dinodontosaurus oliveirai* Romer, 1943. *Diodontosaurus* would become the valid name, thereby replacing a widely accepted generic name with a virtually forgotten name that differs by only a single letter.

8. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to suppress the generic name *Diodontosaurus* Caldas, 1936 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) to place on the Official List of Generic Names in Zoology the name *Dinodontosaurus* Romer, 1943 (gender: masculine), type species by monotypy *Dinodontosaurus oliveirai* Romer, 1943 (a junior subjective synonym of *Dicynodon turpior* Huene, 1935);
- (3) to place on the Official List of Specific Names in Zoology the name *turpior* Huene, 1935, as published in the binomen *Dicynodon turpior* (senior subjective synonym of the specific name of *Dinodontosaurus oliveirai* Romer, 1943, the type species of *Dinodontosaurus* Romer, 1943);
- (4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Diodontosaurus* Caldas, 1936, as suppressed in (1) above.

References

- Anderson, J.M. & Cruickshank, A.R.I. 1978. The biostratigraphy of the Permian and the Triassic. Part 5. A review of the classification and distribution of Permo-Triassic tetrapods. *Palaeontologia Africana*, **21**: 15–44.
- Beltrão, R. 1966. Paleontologia de Santa Maria e São Pedro do Sul, Rio Grande do Sul, Brasil. *Boletim do Instituto de Ciências Naturais da Universidade Federal de Santa Maria*, **2**: 3–114.
- Barberena, M.C., Araujo, D.C. & Lavina, E.L. 1985. Late Permian and Triassic tetrapods of southern Brazil. *National Geographic Research*, **1**: 5–20.
- Caldas, J.A.L.T. 1936. Paleontologia do Rio-Grande-do-Sul o fóssil de São-Pedro. *Revista Instituto Historico e Geografico do Rio-Grande-do-Sul*, **16**: 243–249.
- Cox, C.B. 1965. New Triassic dicynodonts from South America, their origins and relationships. *Philosophical Transactions of the Royal Society*, (B) **248**: 457–516.
- Cox, C.B. 1968. The Chañares (Argentina) Triassic reptile fauna. IV. The dicynodont fauna. *Breviora*, **295**: 1–27.
- Huene, F. von. 1935. Die fossilen Reptilien des südamerikanischen Gondwanalandes an der Zeitenwende. *Ordnung Anomodontia*. Lieferung I. 92 pp. Heine, Tübingen.

- Keyser, A.W. & Cruickshank, A.R.I.** 1979. The origins and classification of Triassic dicynodonts. *Transactions of the Geological Society of South Africa*, **82**: 81–108.
- King, G.M.** 1988. *Anomodontia*. In *Encyclopedia of Paleoherpetology*. (Ed. Kühn). 174 pp. Fischer, Stuttgart.
- Mones, A.** 1986. Palaeovertebrata Sudamericana catálogo sistemático de los vertebrados fósiles de America del Sur Parte 1 Lista Preliminar y Bibliografía. *Courier Forschungsinstitut Senckenberg*, **82**: 1–625.
- Ochev, V.G. & Shishkin, M.A.** 1989. On the principles of global correlation of the continental Triassic on the tetrapods. *Acta Palaeontologica Polonica*, **34**: 149–173.
- Owen, R.** 1845. Description of certain fossil crania discovered by A.G. Bain, Esq., in sandstone rocks at the south-eastern extremity of Africa, referable to different species of an extinct genus of Reptilia (*Dicynodon*), and indicative of a new tribe or sub-order of Sauria. *Transactions of the Geological Society of London*, (2)**7**: 59–84.
- Romer, A.S.** 1943. Recent mounts of fossil reptiles and amphibians in the Museum of Comparative Zoology. *Bulletin of the Museum of Comparative Zoology, Harvard University*, **92**: 331–338.

Case 2785***Palaeopropithecus ingens* G. Grandidier, 1899 (Mammalia, Primates):
proposed conservation of both generic and specific names**

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Abstract. The purpose of this application is to conserve the generic and specific names of *Palaeopropithecus ingens* G. Grandidier, 1899, universally in use for a subfossil lemur from Madagascar. The names are threatened by the unused senior subjective synonyms *Thaumastolemur* Filhol, 1895 and *T. grandidieri* Filhol, 1895.

1. Filhol (1895, p. 13) proposed the new generic and specific names *Thaumastolemur grandidieri* for a primate on the basis of a distal humeral fragment recovered in 1868 by Alfred Grandidier at the subfossil site of Ambolisatra, in southwestern Madagascar.

2. Guillaume Grandidier (1899, p. 345, fig. on p. 346) proposed the name *Palaeopropithecus ingens* for a partial mandible from the nearby site of Belo-sur-Mer and in 1900 (p. 216) added to the hypodigm further mandibular fragments from Ambolisatra. Since that time authors have universally used the name *Palaeopropithecus ingens* for the species represented by the mandibular specimens from Belo and Ambolisatra, and an extensive literature has accumulated that employs this name.

3. In 1902 (p. 498) G. Grandidier synonymised *Thaumastolemur grandidieri* with the prior name *Megaladapis madagascariensis* Major, 1894 (p. 16, based on a nearly complete skull and mandible of another taxon, a large subfossil lemuroid from Ambolisatra). Grandidier repeated this synonymy in 1905 (p. 54). Between the latter date and 1990 the name *Thaumastolemur grandidieri* was to our knowledge never used once apart from being listed as a junior synonym of *M. madagascariensis*. Trouessart (1897, p. 54) seems to have been the last author to cite *Thaumastolemur* as a valid name. The holotype of Filhol's species apparently went unstudied subsequent to its mention by Grandidier (1905).

4. In later years the formerly vexed question of the association of the cranial and postcranial elements of the skeleton of *Palaeopropithecus* was satisfactorily resolved

both by the efforts of Carleton (1936) and Lamberton (see, for example, 1947), and by the discovery of an almost complete associated skeleton (MacPhee et al., 1984).

5. Recently, Vuillaume-Randriamanantena (1990) has relocated the holotype distal humerus of Filhol's (1895) *Thaumastolemur grandidieri*, no. 1906-17 in the collections of the Institut de Paléontologie in Paris. Her study of this element shows that, rather than belonging to *Megaladapis madagascariensis*, it represents the species known universally in the literature of this century as *Palaeopropithecus ingens*.

6. If this conclusion is accepted, as we believe proper, *Palaeopropithecus ingens* G. Grandidier, 1899 becomes a junior subjective synonym of *Thaumastolemur grandidieri* Filhol, 1895. However, allowing Filhol's never-used name to replace the long-entrenched *Palaeopropithecus ingens* would result in considerable confusion, and would violate the criteria of stability of nomenclature (Articles 23b and 79c of the Code). This is particularly the case since the name *Palaeopropithecus* is not only widely cited in the specialized systematic literature but appears in literally hundreds of citations in the extensive secondary literature, in several languages, on primate biology. Among major primary works using the name *Palaeopropithecus* are Standing (1908), Saban (1963) and Tattersall (1982). Texts and works of reference in wide current use that employ this nomenclature include Simons (1972), Fleagle (1988) and Martin (1990). A list of a further 19 references showing usage of the name is held by the Commission Secretariat.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to suppress the following names for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:
 - (a) the generic name *Thaumastolemur* Filhol, 1895;
 - (b) the specific name *grandidieri* Filhol, 1895, as published in the binomen *Thaumastolemur grandidieri*;
- (2) to place on the Official List of Generic Names in Zoology the name *Palaeopropithecus* G. Grandidier, 1899 (gender: masculine), type species by monotypy *Palaeopropithecus ingens* G. Grandidier, 1899;
- (3) to place on the Official List of Specific Names in Zoology the name *ingens* G. Grandidier, 1899, as published in the binomen *Palaeopropithecus ingens* (specific name of the type species of *Palaeopropithecus* G. Grandidier, 1899);
- (4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Thaumastolemur* Filhol, 1895, as suppressed in (1)(a) above;
- (5) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *grandidieri* Filhol, 1895, as published in the binomen *Thaumastolemur grandidieri* and as suppressed in (1)(b) above.

References

- Carleton, A. 1936. The limb bones and vertebrae of the extinct lemurs of Madagascar. *Proceedings of the Zoological Society of London*, **110**: 281-307.
- Filhol, H. 1895. Observations concernant les mammifères contemporains des *Aepyornis* à Madagascar. *Bulletin du Muséum National d'Histoire Naturelle*, **1**(1): 12-14.
- Fleagle, J. 1988. *Primate adaptation and evolution*. 486 pp. Academic Press, New York.
- Grandidier, G. 1899. Description des ossements des lémuriens disparus. *Bulletin du Muséum National d'Histoire Naturelle*, **5**(7): 344-348.

- Grandidier, G.** 1900. Note sur des ossements d'animaux disparus. *Bulletin du Muséum National d'Histoire Naturelle*, **6**(5): 214–219.
- Grandidier, G.** 1902. Observations sur les lémuriens disparus de Madagascar: collections Alluaud, Gaubert, Grandidier. *Bulletin du Muséum National d'Histoire Naturelle*, **8**(7): 497–502.
- Grandidier, G.** 1905. Recherches sur les lémuriens disparus et en particulier sur ceux qui vivaient à Madagascar. *Nouvelles Archives du Muséum National d'Histoire Naturelle*, (4)**7**(1): 1–142.
- Lamberton, C.** 1947. Contribution à la connaissance de la faune subfossile de Madagascar. Note XVI. *Bradytherium* ou *Palaeopropithecus*? *Bulletin de l'Académie Malgache*, (2)**26**: 89–140.
- MacPhee, R.D.E., Simons, E.L., Wells, N. A. & Vuillaume-Randriamanantena, M.** 1984. Team finds giant lemur skeleton. *Geotimes*, **29**(1): 10–11.
- Major, C.I.F.** 1894. On *Megaladapis madagascariensis*, an extinct gigantic lemuroid from Madagascar. *Philosophical Transactions of the Royal Society of London*, (B)**185**: 15–38.
- Martin, R.D.** 1990. *Primate origins and evolution*. 804 pp. Princeton University Press, New Jersey.
- Saban, R.** 1963. Contribution à l'étude de l'os temporal des primates. *Mémoires du Muséum National d'Histoire Naturelle*, (2, A)**29**: 1–377.
- Simons, E.L.** 1972. *Primate evolution: an introduction to man's place in nature*. 322 pp. Macmillan, New York.
- Standing, H.** 1908. On recently discovered subfossil primates from Madagascar. *Transactions of the Zoological Society of London*, **18**: 69–162.
- Tattersall, I.** 1982. *The primates of Madagascar*. 382 pp. Columbia University Press, New York.
- Trouessart, E.L.** 1897. *Catalogus mammalium tam viventium quam fossilium*, Ed. 2, vol. 1. v, 664 pp. Friedlander & Sohn, Berlin.
- Vuillaume-Randriamanantena, M.** 1990. *Palaeopropithecus ingens* Grandidier, 1899 synonyme de *Thaumastolemur grandidieri* Filhol, 1895. *Comptes Rendus de l'Académie des Sciences de Paris*, (2)**310**: 1307–1313.

A comment on this application by E. Delson *et al.* appears on BZN **49**: 73.

Case 2770***Hylobates entelloides* I. Geoffroy Saint-Hilaire, 1842 (Mammalia, Primates): proposed conservation of the specific name**

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Abstract. The purpose of this application is to conserve the specific name of *Hylobates entelloides* I. Geoffroy Saint-Hilaire, 1842, currently in use for the white-handed gibbon of south-west Thailand and Tenasserim (Burma, or Myanmar). The name has been placed on the Official List of Specific Names in Zoology (Opinion 1219) but is threatened by two senior subjective synonyms, *Simia longimana* Schreber, [1774] and *S. albimana* Vigors & Horsfield, 1828.

1. The generic name *Hylobates* Illiger, 1811 (p. 67) was placed on the Official List of Generic Names in Zoology in Opinion 122 (January 1931). Subsequently, the specific name of *Homo lar* Linnaeus, 1771 (p. 521), the type species of *Hylobates* by monotypy, was placed on the Official List of Specific Names (Direction 22, November 1955). In Opinion 1219 (September 1982; see also BZN 35: 197–198) a neotype for *Homo lar* was designated under the plenary powers which attached the name to the Malayan white-handed gibbon (the 'petit gibbon' of Buffon, 1766, pl. 3), type locality 'Malacca', in accordance with current understanding and usage. The specific name of *Hylobates entelloides* I. Geoffroy Saint-Hilaire, 1842 (p. 717), currently in use for the white-handed gibbon of Thailand and Tenasserim (the 'grand gibbon' of Buffon, 1766, pl. 2), was also placed on the Official List in Opinion 1219. However, the name *entelloides* has two senior subjective synonyms and this problem has so far not been resolved. The name is currently used as a subspecies of *Hylobates lar* (Linnaeus).

2. In his description of *Homo lar* Linnaeus (1771) cited two previous references:
'Golock. Act. Angl. 1769. pl. 71. t. 3.

Gibbon. Buff. anim. XIV. p. 92. t. 2, 3?'

The second of these citations refers to Buffon's two plates (1766, pls. 2 and 3) which were reproduced in Schreber ([1774], p. 67, pl. 3; see Sherborn, 1891, p. 588 for the date of publication) under the name *Simia longimana*; Schreber's specific name is therefore a junior subjective synonym of *Homo lar* Linnaeus, 1771. Latreille (1804, p. 276) was the first to separate Buffon's large and small gibbons, undifferentiated by Linnaeus and Schreber, into separate taxa, referring to the former as *Pithecus lar* Linnaeus and the

latter by a new name, *P. varius*. The attachment of the name *lar* to the Malayan white-handed gibbon in Opinion 1219 renders *lar* a senior subjective synonym of *varius* Latreille, 1804, and also of *P. variegatus* Geoffroy Saint-Hilaire, 1812 (p. 88), a name which was also proposed for Buffon's small gibbon (see Groves, 1972, p. 12).

3. I. Geoffroy Saint-Hilaire (1842, p. 717) described *Hylobates entelloides*, the name currently in use for the Thailand subspecies of white-handed gibbon, on three individuals of different ages and sexes collected by a missionary, Monsieur Barre, from 'la presque île Malaise, le douzième degré de latitude nord'. Saint-Hilaire (1851) listed the syntypes in the Muséum d'Histoire Naturelle in Paris and noted that two of the specimens (mounted) had been illustrated (Saint-Hilaire, [1843], pp. 532–535, pl. 29). Rode (1938, p. 205) also listed the syntypes and noted one (no. 4a, adult male) as the 'holotype'; this does not constitute designation of a lectotype (Article 72b(vii)). Groves (1972, p. 13) reported that 'the type skin appears to be no longer extant'. However, a further search by one of us (C.P.G.) has since confirmed that the specimens listed by Rode (an adult male with a young male clinging to it, and an adult female) are in fact still present in the type collection of the Muséum in Paris, and that they are indeed specimens (in pale colour phase) of the taxon described by Groves (1972) as *Hylobates lar entelloides*. In his revision of the HYLOBATIDAE, Groves (1971, pp. 74–75) considered that *Simia longimana* Schreber, [1774] was not only a junior synonym (in part) of *Homo lar* but was also a senior subjective synonym (in part) of *Hylobates entelloides*. With the exception of the invalid use of *longimana* by Simonetta (1957, p. 62) to include the Malayan and Sumatran white-handed gibbons the name has not been used since Schreber's [1774] publication and we propose that it be suppressed.

4. The nominal species *Simia albigibba* Vigers & Horsfield, 1828 (pp. 107–109) was based on two specimens from the 'Sumatra collection' presented to the museum of the Zoological Society of London by Sir Thomas Stamford Raffles. One syntype, a skin with skull, is now in the collections of the Natural History Museum, London, specimen no. BM(NH) 1855.12.24.6, but the whereabouts of the other syntype is unknown. The date of publication for the name *albigibba* given by Gray ([1871], p. 10) as 'Horsf. Zool. Journ. 1820', and repeated by Simonetta (1957, p. 63), was an error since the *Zoological Journal* was published from 1824 to 1835. The name *albigibba* has been used to refer to the white-handed gibbon of north Sumatra (Chenu, [after 1850], p. 67, pl. 10 bis; Kloss, 1929, p. 118; Miller, 1942, p. 131) but Fooden (1969, p. 629) and Groves (1972, p. 12) considered the type locality given for *albigibba* to be incorrect. Fooden thought the species was more likely to be Malayan but Groves (1972, p. 12), following an examination of the existing syntype, considered it to be a specimen of the species from Tenasserim and southern Thailand. The name *albigibba* is thus a senior subjective synonym of *Hylobates entelloides* I. Geoffroy Saint-Hilaire, 1842 and we propose that it be suppressed to conserve the much used name *entelloides*. To adopt *albigibba* for the Thailand subspecies would be destabilising and would result in considerable confusion, particularly as the name has been used in the past for a Sumatran gibbon. Since Groves's (1972) work no author has adopted the name *albigibba* for the Thailand gibbon and the next available name for the northern Sumatran gibbon, *Hylobates lar vestitus* (Miller, 1942) (p. 131; described as *H. albigibbus vestitus*), has been universally used (see the references cited below).

5. The name *entelloides* I. Geoffroy Saint-Hilaire, 1842 is universally in use for the white-handed gibbon from Thailand and Tenasserim and appears in works on primate

biology, ecology and conservation, as well as taxonomy. The name has been used in the following representative list of recent publications which cover these fields: Fooden (1971), Creel & Preuschoft (1976, 1984), Chivers (1977), Roonwal & Mohnot (1977), Haimoff, Gittins, Whitten & Chivers (1984), Marshall, Sugardjito & Markaya (1984), Marshall & Sugardjito (1986) and Tuttle (1986).

6. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to suppress the following specific names for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:
 - (a) *longimana* Schreber, [1774], as published in the binomen *Simia longimana*;
 - (b) *albinana* Vigors & Horsfield, 1828, as published in the binomen *Simia albinana*;
- (2) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the following names:
 - (a) *longimana* Schreber, [1774], as published in the binomen *Simia longimana* and as suppressed in (1)(a) above;
 - (b) *albinana* Vigors & Horsfield, 1828, as published in the binomen *Simia albinana* and as suppressed in (1)(b) above.

References

- Buffon, G.L.L. de. 1766. *Histoire naturelle, général et particulière, avec la description du cabinet du Roi*, vol. 14. 411 pp., 41 pls. Imprimerie Royale, Paris.
- Chenu, J.C. [after 1850]. *Encyclopédique d'Histoire naturelle*. Quadrumanes. 312 pp., 34 pls. Paris.
- Chivers, D.J. 1977. The lesser apes. Pp. 539–598 in H.S.H. Prince Rainier III of Monaco & Bourne, G.H. (Eds.), *Primate conservation*. xviii, 658 pp. Academic Press, New York.
- Creel, N. & Preuschoft, H. 1976. Cranial morphology of the lesser apes: a multivariate statistical study. Pp. 219–303 in Rumbaugh, D.M. (Ed.), *Gibbon and siamang*, vol. 4 (suspensory behavior, locomotion, and other behaviors of captive gibbons; cognition). viii, 316 pp. Karger, Basle.
- Creel, N. & Preuschoft, H. 1984. Systematics of the lesser apes: a quantitative taxonomic analysis of craniometric and other variables. Pp. 562–613 in Preuschoft, H., Chivers, D.J., Brockelman, W.Y. & Creel, N. (Eds.), *The lesser apes: evolutionary and behavioural biology*. xiii, 709 pp. Edinburgh University Press, Edinburgh.
- Fooden, J. 1969. Color-phase in gibbons. *Evolution*, 23: 627–644.
- Fooden, J. 1971. Report on primates collected in western Thailand January–April, 1967. *Fieldiana (Zoology)*, 59(1): 1–62.
- Geoffroy Saint-Hilaire, I. 1812. Tableau des Quadrumanes, ou des animaux composant le premier Ordre de la Classe des Mammifères. *Annales du Muséum d'Histoire Naturelle*, 19: 85–122.
- Geoffroy Saint-Hilaire, I. 1842. Sur les singes de l'ancien monde, spécialement sur les genres *Gibbon* et *Semnopitheque*. *Compte Rendu Hebdomadaire des Séances de l'Académie des Sciences*, 15: 716–720.
- Geoffroy Saint-Hilaire, I. [1843]. Description des mammifères nouveaux ou imparfaitement connus de la collection du Muséum d'Histoire Naturelle et remarques sur la classification et les caractères des mammifères. Premier Mémoire. Famille des singes. *Archives du Muséum d'Histoire Naturelle*, 2: 485–592.
- Geoffroy Saint-Hilaire, I. 1851. Introduction et catalogue des Primates. Pp. xv, vii, 96 in Geoffroy Saint-Hilaire, I., Prévost, F. & Pucheran, [J.], *Catalogue méthodique de la collection des*

- mammifères, de la collection des oiseaux et des collections annexes du Muséum d'Histoire Naturelle de Paris. Gide & Baudry, Paris.
- Gray, J.E. [1871]. *Catalogue of the monkeys, lemurs, and fruit-eating bats in the collection of the British Museum*. viii, 137 pp. British Museum, London.
- Groves, C.P. 1972. Systematics and phylogeny of gibbons. Pp. 1–89 in Rumbaugh, D.M. (Ed.), *Gibbon and siamang*, vol. 1 (evolution, ecology, behaviour and captive maintenance). x, 263 pp. Karger, Basle.
- Haimoff, E.H., Gittins, S.P., Whitten, A.J. & Chivers, D.J. 1984. A phylogeny and classification of gibbons based on morphology and ethology. Pp. 614–632 in Preuschoft, H., Chivers, D.J., Brockelman, W.Y. & Creel, N. (Eds.), *The lesser apes: evolutionary and behavioural biology*. xiii, 709 pp. Edinburgh University Press, Edinburgh.
- Illiger, C. 1811. *Prodromus systematis mammalium et avium*... xviii, 301 pp. Berlin.
- Kloss, C.B. 1929. Some remarks on the gibbons, with the description of a new subspecies. *Proceedings of the Zoological Society of London*, **1929**(8): 113–127.
- Latreille, P.A. 1804. Tableau méthodique des singes. Pp. 275–298 in Sonnini, C.S. (Ed.), *Histoire naturelle générale et particulière, par Leclerc de Buffon*, vol. 36 (Histoire naturelle des singes). 302 pp. Dufart, Paris.
- Linnaeus, C. 1771. *Regni animalis appendix. Mammalia*. Pp. 521–523 in: *Mantissa plantarum altera generum editiones VI et specierum editionis II*. Pp. [iv], 143–588. Salvii, Holmiae.
- Marshall, J.T. & Sugardjito, J. 1986. Gibbon systematics. Pp. 137–185 in Swindler, D.R. & Erwin, J. (Eds.), *Comparative primate biology*, vol. 1 (systematics, evolution and anatomy). xvi, 820 pp. Liss, New York.
- Marshall, J.T., Sugardjito, J. & Markaya, M. 1984. Gibbons of the *lar* group. Pp. 533–541 in Preuschoft, H., Chivers, D.J., Brockelman, W.Y. & Creel, N. (Eds.), *The lesser apes: evolutionary and behavioural biology*. xiii, 709 pp. Edinburgh University Press, Edinburgh.
- Miller, G.S. 1942. Zoological results of the George Vanderbilt Sumatran expedition, 1936–1939. Part V — Mammals collected by Frederick A. Ulmer, jr., on Sumatra and Nias. *Proceedings of the Academy of Natural Sciences of Philadelphia*, **94**: 107–166.
- Rode, P. 1938. Catalogue des types de mammifères du Muséum National d'Histoire Naturelle. Ordres des Primates, sous-ordre des simiens. *Bulletin du Muséum National d'Histoire Naturelle*, (2)**10**(3): 202–251.
- Roonwal, M.L. & Mohnot, S.M. 1977. *Primates of south Asia: ecology, sociobiology, and behavior*. xviii, 420 pp. Harvard University Press, Cambridge, Massachusetts.
- Schreber, J.C.D. von. [1774]. *Die Säugethiere in Abbildungen nach der Natur mit Beschreibungen*, vol. 1. 188 pp., 62 pls. Weigel, Leipzig.
- Sherborn, C.D. 1891. On the dates of the parts, plates and text of Schreber's 'Säugethiere'. *Proceedings of the Zoological Society of London*, **1891**(4): 587–592.
- Simonetta, A. 1957. Catalogo e sinonimia annotata degli ominoidi fossili ed attuali (1758–1955). *Atti della Società Toscana di Scienze Naturali Residente in Pisa*, (B)**64**: 53–112.
- Tuttle, R.H. 1986. *Apes of the world, their social behavior, communication, mentality and ecology*. Pp. xix, 421 pp. Noyes Publications, New Jersey.
- Vigors, N.A. & Horsfield, T. 1828. Observations on some of the mammalia contained in the Museum of the Zoological Society. *Zoological Journal*, **4**(13): 105–113.

Comment on the article *Problems in the Nomenclature of Higher Taxonomic Categories* by Ya.I. Starobogatov
(See BZN 48: 6–18)

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I consider the proposals by Starobogatov (1991) to be important and timely, and I agree with them with a single though important reservation. I feel a mistake the proposition (BZN 48: 13) to allow formal availability of a descriptive (non-typified) name with its author and date, for this will prevent its replacement by the typified name. Indeed, under this proposal the typified name will be a junior synonym of the descriptive name. Until the names of higher taxa are entirely regulated by the Code the current practice is better, that is the use of descriptive names despite their having no formal availability.

Additionally, I think that hemihomonymy (see pp. 8–9) would be more securely avoided if suprageneric names ended in *-i* and *-ae*, not *-es*.

Comments on the proposed conservation in their accepted usage of the nominal taxa *Bucephalus* Baer, 1827 and *B. polymorphus* Baer, 1827 (Trematoda)
(Case 2251; see BZN 36: 30–36, 49: 6–11)

Editorial Note: A detailed comment opposing Dr Baturo's application was received from Dr Srivastava (Zoological Survey of India) on 5 January 1981. Extensive correspondence took place between Dr Srivastava, Mr R.V. Melville (then Secretary of the Commission) and Dr Baturo between January 1981 and April 1985. A condensed version of Dr Srivastava's comments is now published for the first time. Comments in support of Dr Baturo's application from Dr D.I. Gibson (*Head of the Parasitic Worms Division, The Natural History Museum, London*), from Dr O.N. Pugachev (*Head of the Parasitic Worms Department, Zoological Institute, Academy of Sciences, St Petersburg*) and from Professor J.C. Pearson (*Professor of Helminthology, Department of Parasitology, University of Queensland*) are also published. Dr Gibson's comment takes recent usage into account.

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This comment opposes Dr Baturo's application to conserve the generic name *Bucephalus* Baer, 1827, with type species *B. polymorphus* Baer, 1827 in place of *Gasterostomum* Siebold, 1848, with type species *G. fimbriatum* Siebold, 1848, and to use *Rhipidocotyle* Diesing, 1858, with type species *R. galeatum* (Rudolphi, 1819) in place of *Bucephalus* Baer, 1827, with type species *B. polymorphus* Baer, 1827. The history of the confused classification of bucephalid trematodes shows that application of the normal rules of zoological nomenclature is more desirable than invoking the plenary powers of the Commission to stabilise the systematics of this group.

Stunkard (1976, p. 309), while discussing the systematics of these trematodes, remarked: 'The taxonomy of the bucephalid trematodes is complicated because of unsupported and unwarranted presumptions between larval and adult stages'. He further stated (p. 313): 'The status of *Bucephalus polymorphus* von Baer, 1827 and *Gasterostomum fimbriatum* von Siebold, 1848, long regarded as specifically identical and the only bucephalid species in freshwater hosts in Europe, is equivocal. *Bucephalus polymorphus* is the name of a cercaria whose adult stage is yet to be disclosed and the larval stages of *G. fimbriatum* are unknown'.

Baturo (1977), while working on freshwater fish parasites of Goslawickie and Slesinske Lakes (Central Poland), collected bucephalid sporocysts and cercariae from the bivalve *Dreissena polymorpha*, completed their development and found that they developed into adults resembling *Gasterostomum fimbriatum* Siebold, 1848 which, on account of misconceptions by earlier workers, is known as *Bucephalus polymorphus* Baer, 1827. These larval stages, though, did not correspond to the cercaria described by Baer (1827) under the name *Bucephalus polymorphus*, yet Baturo (1977) put them under this name. She found sporocysts and cercariae of another bucephalid parasitising the bivalve *Unio pictorum* in Lake Slesinske, which were identical with those described by Baer (1827) as *Bucephalus polymorphus* from *Unio pictorum* and *Anodonta mutabilis* in European freshwaters. She completed the life history of these larval stages and found that they developed into adult *Rhipidocotyle illensis* (Ziegler, 1883), a fact already suspected by Ziegler (1883). Baturo wrongly named this cercaria as *Rhipidocotyle illensis* instead of *Bucephalus polymorphus*, thus further complicating the confused status of bucephalid worms. In following the rules of zoological nomenclature, Baturo (1977) should have adopted the genus *Gasterostomum* Siebold, 1848, with its type species *fimbriatum* and relegated the genus *Rhipidocotyle* Diesing, 1858 and the species *Rhipidocotyle illensis* (Ziegler, 1883) (= *Distoma campanula* Dujardin, 1845) to the synonymy of the genus *Bucephalus* Baer, 1827 and the species *B. polymorphus* Baer, 1827. Instead of following this normal procedure she appealed to the International Commission on Zoological Nomenclature, in the name of stability, to disregard the 'forgotten' name *Gasterostomum* with its type species *fimbriatum*.

The generic name *Bucephalus* with its type species *polymorphus* was based on the larval form, whereas the genus *Gasterostomum* with its type species *fimbriatum* was described on adult worms. Synonymy was based on the erroneous assumption that the larva *Bucephalus polymorphus* develops into the adult *Gasterostomum fimbriatum*. Under Article 23f(ii) of the [1985] Code the Principle of Priority applies 'even if two or more generations, forms, stages or sexes of a species are named as different taxa'.

That the generic name *Gasterostomum* Siebold is not a forgotten name is evident from the fact that the question of its validity has been repeatedly raised.

A parallel case occurs in this family where the cercaria *Bucephalopsis haimeanus* Lacaze-Duthiers, 1854 was supposed to have developed into the adult *Bucephalopsis gracilescens* Rudolphi, 1819, but the life history was never proved. In this case Hopkins (1954) restricted the generic name *Bucephalopsis* to the cercaria *haimeanus* and proposed a new generic name *Bucephaloides* for the adult *gracilescens*. Srivastava & Chauhan (1973), while agreeing with the restriction of the generic name *Bucephalopsis* to the cercaria *haimeanus*, refuted the proposal of a new name *Bucephaloides* for the adult species since a senior synonym *Proisorhynchoides* Dollfus, 1929, with type species *ovatus* by original designation, based on the adult characters, was available. They

resurrected the genus *Proisorhynchoides* Dollfus, 1929, for all the adult species included under the genus *Bucephalopsis*, relegating *Bucephaloides* Hopkins, 1954, to its synonymy. This contention has been accepted by Stunkard (1974).

In the case of parasites where larval stages are different from adults and both are described as separate species, such complications are bound to arise when the life histories are worked out. It is advisable to apply the Principle of Priority to such cases.

In view of the foregoing comments it would be desirable for the Commission to reject Dr Baturó's application, and to declare valid the name *Gasterostomum* Siebold, 1848 (type species *Gasterostomum fimbriatum* Siebold, 1848) and the name *Bucephalus* Baer, 1827, rejecting the name *Rhipidocotyle* Diesing, 1858 as its synonym.

Additional references

- Hopkins, S.H. 1954. The American species of trematode confused with *Bucephalus* (*Bucephalopsis*) *haimeanus*. *Parasitology*, **44**: 353–370.
- Srivastava, C.B. & Chauhan, B.S. 1973. A review of Indian gasterostomes (Trematoda). *Records of the Zoological Survey of India*, **67**: 1–13.
- Stunkard, H.W. 1974. The life cycles, intermediate hosts and larval stages of *Rhipidocotyle transversale* Chandler, 1935 and *Rhipidocotyle lintoni* Hopkins, 1954: life cycles and systematics of bucephalid trematodes. *Biological Bulletin*, **150**: 294–317.
- Stunkard, H.W. 1976. The life cycles, intermediate hosts and larval stages of *Rhipidocotyle transversale* Chandler, 1935 and *Rhipidocotyle lintoni* Hopkins, 1954: life cycles and systematics of bucephalid trematodes. *Biological Bulletin*, **150**: 294–317.

(2) David I. Gibson

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I fully support Dr Baturó's application for the following reasons:

- (i) The work of Wallet & Lambert (1984) has confirmed Baturó's (1977) results concerning the identity of the cercaria which develops into adults currently recognised as *Bucephalus polymorphus*.
- (ii) The only major compendia of European freshwater fish parasites currently in use as identification manuals, those of Bykhovskaya-Pavlovskaya et al. (1962; translated into English, 1964) and Bauer (1987; translation now in preparation); both use the current conceptions of the adult forms of *Bucephalus polymorphus* and *Rhipidocotyle campanula* (= *illensis*). The former has been widely used and cited in the past, and the latter is being and will be widely used in the future.
- (iii) The names currently in use are now well accepted and regularly used in surveys, checklists and other studies of the parasites of freshwater fish parasites in Europe and the former Soviet Union (e.g. Osmanov, 1971; Kennedy, 1974; Ergens et al., 1975; Tell, 1980; Ivantsiv & Chernogorenko, 1984; Pojmanska, 1985; Walter, 1988). Between 1988 and 1990 I have found eight references referring to *Bucephalus polymorphus* and nine to *Rhipidocotyle campanula* or its synonym in European fishes.
- (iv) In relation to one of Dr Srivastava's comments, although *Gasterostomum* is not exactly a 'forgotten' name because its archaic vernacular 'gasterostome' is still in occasional usage, it is an 'unused' name, only rarely being referred to except in synonymy for at least the past 60 years.

- (v) Strict application of the Code would mean that adults now referred to as *Bucephalus polymorphus* would become *Gasterostomum fimbriatum* and adults currently known as *Rhipidocotyle campanula* (or *R. illensis*) would become *Bucephalus polymorphus*. Such an exchange of well-established names would cause considerable confusion, not least amongst ecologists and other associated parasitological disciplines, with a resulting loss or confusion of data.
- (vi) The change of the name *Bucephalus* to *Gasterostomum* and the replacement of *Rhipidocotyle* by *Bucephalus* would have major repercussions outside the European freshwater arena, since both genera contain species from freshwater fishes in other parts of the world, notably North America, and both contain numerous species in marine fishes from various parts of the world.
- (vii) A solid nomenclatural base for the systematics of bucephalids in European freshwater is necessary because recent work (Taskinen et al., 1991) has shown that there is a second species of *Rhipidocotyle* in European waters, the cercaria of which has a gross morphology similar to that which develops into adults currently recognised as *Bucephalus polymorphus*. This new form will shortly be described.

It is my belief that the International Code of Zoological Nomenclature should be used with a certain amount of common sense and not applied rigidly in every instance. In view of the considerable confusion which would be caused by the rigid application of the Principle of Priority, I am of the opinion that this is a case where it would be apt and sensible for the Commission to use its powers and accede to Dr Baturo's application.

Additional references

- Bauer, O.N. (Ed.) 1987. [*Keys to the parasites of the freshwater fish fauna of the USSR.*], vol. 3. 583 pp. Izdatel'stvo Akademii Nauk SSSR, Leningrad. [In Russian.]
- Bykhovskaja-Pavlovskaja, I.E., Gusev, A.V., Dubinina, M.N. & six others. 1962. [*Key to parasites of freshwater fish of the U.S.S.R.*] 776 pp. *Opredeliteli po Faune SSSR*, No. 80. [English translation. 1964. Israel Program for Scientific Translations, Jerusalem.]
- Ergens, R., V.A. Gussev, N.A. Izyumova & K. Molnar. 1975. Parasite fauna of fishes of the Tisa River Basin. *Rozprawy Ceskoslovenske Akademie Ved, Rada Matematickych a Prirodnich Ved*, 85(2): 3-117.
- Ivantsiv, V.V. & Chernogorenko, M.I. 1984. The life cycle of *Rhipidocotyle illense* (Trematoda, Bucephalidae). *Vestnik Zoologii*, 1984(2): 66-69. [In Russian.]
- Kennedy, C.R. 1974. A checklist of British and Irish freshwater fish parasites with notes on their distribution. *Journal of Fish Biology*, 6: 613-644.
- Osmanov, S.O. 1971. [*Parasites of fish of Uzbekistan.*] 532 pp. Izdatel'stvo 'FAN' Uzbekskoi S.S.R., Tashkent. [In Russian.]
- Pojmanska, T. 1985. An analysis of seasonality of incidence and maturation of some fish parasites, with regard to thermal factor. IV. *Bucephalus polymorphus* Baer, 1827. *Acta Parasitologica Polonica*, 30: 25-34.
- Taskinen, J., Valtonen, E.T. & Gibson, D.I. 1991. Studies on bucephalid digenceans parasitising molluscs and fishes in Finland. I. Ecological data and experimental studies. *Systematic Parasitology*, 19: 81-94.
- Tell, H. 1980. [On abundantly occurring fish parasites of Lake Peipus-Pskov]. *Hüdrobioloogilised Uurimused*, 9: 98-109. [In Russian.]
- Wallet, M. & Lambert, A. 1984. Caractérisation de la cercaire de *Bucephalus polymorphus* Baer, 1827 (Trematoda, Bucephalidae): chétotaxie et système excréteur. *Annales de Parasitologie Humaine et Comparée*, 59: 583-588.
- Walter, U. 1988. Zur Parasitenfauna von *Stizostedion lucioperca* aus Boddengewässern der Ostseeküste der DDR. *Angewandte Parasitologie*, 29: 215-219.

(3) O.N. Pugachev

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With reference to Dr Baturo's application to the Commission regarding *Bucephalus polymorphus*, I should like to support her proposal and to draw your attention to similar problems which can arise when the Code is applied rigidly in relation to parasitic worms with complex life-cycles. The Code was developed essentially for free-living organisms, where the number of conflicting cases based upon names derived from different life-history stages are few in relation to those of parasitic organisms. In view of this, there should be some flexibility in the application of the Code and, perhaps, future additions to the Code. In this particular instance, if the Code is applied rigidly, then much confusion could result.

(4) J.C. Pearson

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I support whole-heartedly Dr Baturo's application to the Commission on *Bucephalus* and the combination *Bucephalus polymorphus*.

Report on the proposed suppression of the generic name *Belemnites* Lamarck, 1799 (Mollusca, Coleoidea), with a proposal that the family-group name BELEMNITIDAE Owen, 1838 be ruled unavailable and be replaced by PASSALOTEUTHIDIDAE Naef, 1922 (Case 2571; see BZN 43: 355–359; 44: 48, 194; 45: 50; 46: 267–272)

P.K. Tubbs

Executive Secretary, International Commission on Zoological Nomenclature

The previous history of this case was summarized in BZN 46: 267–269. The application by Drs P. Doyle and W. Riegraf proposed the suppression of the generic name *Belemnites* Lamarck, 1799 and the specific name of the (indeterminate) type species *B. paxillosa* Lamarck, 1801. In contrast to the vernacular collective name 'belemnites', *Belemnites* has for many years been essentially unused as a generic name although the family name BELEMNITIDAE has remained in common use. BELEMNITIDAE, in recent times treated as though typified by the nominal genus *Passaloteuthis* Lissajous, 1915 (p. 9), has previously been attributed to d'Orbigny (1845) but Mr D. Heppell has pointed out that it was made available by Owen (1838, p. 127). The application called for the designation of *Passaloteuthis* as the type genus of the BELEMNITIDAE by the use of the Commission's plenary powers; this was widely supported, and, as reported in BZN 46: 268, in March 1989 the Commission voted in favour by 20 votes to 3. However, in dissenting, Prof W.D.L. Ride asked that the case be resubmitted because he considered that the designation of *Passaloteuthis* as the type genus of BELEMNITIDAE would be 'seriously upsetting' by being a departure from a fundamental principle of the Code, namely Article 63 (eponymous families and type genera). Prof Ride proposed that *Belemnites bruguierianus* d'Orbigny, 1843, the type species of *Passaloteuthis*, be ruled

to be also the type species of *Belemnites* and that the latter name be then deemed a junior objective synonym of *Passaloteuthis*: thus the only function of *Belemnites* would be to stand as the formal type genus of BELEMNITIDAE. Responses to Prof Ride's proposals by eight palaeontologists were published in BZN 46: 269–272 and a ninth (by Dr T. Engeser, *Universität Hamburg, Germany*) was noted on the voting papers sent to Commissioners in September 1990; with one exception they supported the original course. In the September 1990 vote the Commission was asked either (a) again to approve the Doyle & Riegraf application or (b) to accept Prof Ride's alternative. Thirteen Commissioners voted in favour of each course, and no Opinion has been issued.

Drs Doyle and Riegraf have reiterated that any retention of *Belemnites* as a generic name, even as a synonym deemed to be junior, would be unacceptable to workers in the belemnite field. In the light of the above history they now propose that BELEMNITIDAE should be abandoned in favour of PASSALOTEUTHIDINAE Naef, 1922 (p. 230), which was treated as a superfamily by Saks & Nal'nyaeva (1967). The emended suffix -IDINAE is both correct and in accord with other family-group names based on generic names ending in *-teuthis*. Dr Doyle has pointed out that the valid specific name of *Belemnites bruguierianus* d'Orbigny, 1843, the type species of *Passaloteuthis*, is *bisulcatus* de Blainville, 1827 (p. 79).

The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to confirm the previous (March 1989) vote suppressing the generic name *Belemnites* Lamarck, 1799 and the specific name of *B. paxillosa* Lamarck, 1801;
- (2) to use its plenary powers to rule that the name BELEMNITIDAE Owen, 1838 is unavailable because the name of the type genus of the nominal family has been suppressed;
- (3) to confirm the previous (March 1989) placement of the following names:
 - (a) *Passaloteuthis* Lissajous, 1915 on the Official List of Generic Names in Zoology;
 - (b) *Belemnites* Lamarck, 1799 on the Official Index of Rejected and Invalid Generic Names in Zoology;
 - (c) *paxillosa* Lamarck, 1801, as published in the binomen *Belemnites paxillosa*, on the Official Index of Rejected and Invalid Specific Names in Zoology;
- (4) to place on the Official List of Specific Names in Zoology the name *bisulcatus* de Blainville, 1827, as published in the binomen *Belemnites bisulcatus* (senior subjective synonym of *Belemnites bruguierianus* d'Orbigny, 1843, the type species of *Passaloteuthis* Lissajous, 1915);
- (5) to place on the Official List of Family-Group Names in Zoology the name PASSALOTEUTHIDINAE Naef, 1922 (type genus *Passaloteuthis* Lissajous, 1915);
- (6) to place on the Official Index of Rejected and Invalid Family-Group Names in Zoology the name BELEMNITIDAE Owen, 1838, as ruled in (2) above to be unavailable because the name of its type genus *Belemnites* Lamarck, 1799 has been suppressed.

References

- Blainville, H.M.D. de. 1827. *Mémoire sur les Bêlemnites, considérées zoologiquement et géologiquement*. 136 pp., 5 pls. Paris.

- Lissajous, M. 1915. Quelques remarques sur les bélemnites Jurassiques. *Bulletin de la Société d'Histoire Naturelle de Mâcon*, 1915(1): 1–32.
- Naef, A. 1922. *Die fossilen Tintenfische*. 322 pp. Fischer, Jena.
- Owen, R. 1838. Descriptions of some new and rare Cephalopoda. *Transactions of the Zoological Society of London*, 2(2): 103–130.
- Saks, V.N. & Nal'nyaeva, T.I. 1967. Recognition of the superfamily Passaloteuthaceae in the suborder Belemnoida (Cephalopoda, Dibranchia, Decapoda). *Doklady Akademii Nauk SSSR*, 173: 438–441. [In Russian.]

Comments on the proposed confirmation of unavailability of the name *Fusus* Helbling, 1779 (Mollusca, Gastropoda)

(Case 2729; see BZN 48: 92–96, 244–246)

(1) Barry Roth

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I write in support of the application by Petit & Wilson regarding the availability of the putative genus-group name *Fusus* Helbling, 1779. The crucial point is made in para. 10 (BZN 48: 93): the name cannot continue to be accepted for one purpose (as a senior homonym of *Fusus* Bruguière, 1789) and rejected for another (as a senior subjective synonym of *Colubraria* Schumacher, 1817 and *Cumia* Bivona-Bernardi, 1838); such a split requires action by the Commission.

The suggestion of BZN 48: 94, para. 17, a ruling that *Fusus* Helbling is unavailable, is a reasonable solution. Partisans of the name *Fusinus* Rafinesque, 1815, which would fall as a junior objective synonym of *Fusus* Bruguière, 1789, would undoubtedly prefer another form of solution, but in any event action by the Commission is warranted.

(2) A.G. Beu

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We should like to comment on the case of *Fusus* Helbling, 1779. We have seen the comment by Prof Emily Vokes (BZN 48: 245–246) and essentially agree with her, although we go a little further with our alternative proposals.

In our opinion the question of availability of the name *Fusus* Helbling, 1779, as presented by Petit & Wilson (BZN 48: 92–96), is largely irrelevant to the main question of nomenclatural stability inherent in their case. By far the major point of stability at issue here is that, since Dall (1906) advocated the adoption of *Fusinus* Rafinesque, 1815 in place of *Fusus* Bruguière, 1789, the usage of *Fusinus* in this sense has become the normal, thoroughly accepted practice by 100% of malacologists and palaeontologists. The genus group now universally known as *Fusinus* comprises several large,

spectacular, tropical Indo-West Pacific species, and consequently *Fusinus* has been used as the valid name in many scientific papers and a large number of popular books during this century. Petit & Wilson are swimming against a very strong tide of well established usage and there is no doubt that the reintroduction of *Fusus* Bruguière in place of *Fusinus* would cause far more instability than would leaving the status quo.

We agree, however, with Petit & Wilson that *Fusus* Helbling is an unsatisfactory name to have available for the Mediterranean species often known as *Colubraria reticulata* (de Blainville, [1829], p. 118, pl. 4D, fig. 5) (see paras. 5 and 6 of the application). This is because the rank and status of genera are uncertain in this group and it is possible that *Fusus* Helbling could threaten the stability of the much better known, universally accepted name *Colubraria* Schumacher, 1817 (pp. 76, 251). Although their type species are different the taxonomic distinction between these nominal genera is based largely on the protoconch and on differences in the shell size, whereas developmental differences alone are not now accepted by most authors as having any taxonomic significance above species level. Once again the name *Colubraria* is so well known and consistently used for a large group of tropical Indo-West Pacific and Caribbean gastropods that its replacement by *Fusus* Helbling would be a major upset to the stability of nomenclature (as was pointed out by Cernohorsky, 1971, p. 153). A junior subjective synonym, *Cumia* Bivona-Bernardi, 1838, is available to replace *Fusus* Helbling should the *Colubraria reticulata* group prove to differ from *Colubraria* at the generic level, and thus a new name would not be required.

It should be pointed out that Iredale (1915, pp. 465–466; 1929, p. 288) twice used the family-group name FUSIDAE in place of what in more recent years has been known as COLUBRARIIDAE; the second reference was not listed by Petit & Wilson in their application. Iredale clearly thought *Fusus* Helbling a genus distinct from, but closely related to, *Colubraria*. Most authors would now agree that genera related to *Colubraria* belong in the BUCCINIDAE, so nomenclatural difficulties are unlikely to arise over the family-group name.

In our opinion the best solution to this case is to reject both *Fusus* Helbling, 1779 and *Fusus* Bruguière, 1789. This solution will allow the greatest possible stability in nomenclature by maintaining the status quo, allowing continued usage of *Colubraria* Schumacher, 1817 and *Fusinus* Rafinesque, 1815 respectively. Suppression of *Fusus* Helbling for priority but not for homonymy will ensure that *Fusus* Bruguière remains a junior homonym and thus invalid; in view of the doubt whether *Fusus* Helbling is available (BZN 48: 244–245), we propose that the Commission's plenary powers be used to suppress the name.

In place of the proposals made by Petit & Wilson (BZN 48: 94–95), the International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to suppress the generic name *Fusus* Helbling, 1779 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) to place on the Official List of Generic Names in Zoology the following names:
 - (a) *Fusinus* Rafinesque, 1815 (gender: masculine), type species, by subsequent monotypy by Lamarck (1799) of the replaced nominal genus *Fusus* Bruguière, 1789, *Murex colus* Linnaeus, 1758;
 - (b) *Colubraria* Schumacher, 1817 (gender: feminine), type species by monotypy *Colubraria granulata* Schumacher, 1817;

- (3) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *colus* Linnaeus, 1758, as published in the binomen *Murex colus* (specific name of the type species of *Fusinus* Rafinesque, 1815);
 - (b) *granulata* Schumacher, 1817, as published in the binomen *Colubraria granulata* (specific name of the type species of *Colubraria* Schumacher, 1817);
- (4) to place on the Official List of Rejected and Invalid Generic Names in Zoology the following names:
 - (a) *Fusus* Helbling, 1779, as suppressed in (1) above;
 - (b) *Fusus* Bruguière, 1789 (a junior homonym of *Fusus* Helbling, 1779).

Additional references

- Blainville, H.M.D. de. [1829]. Malacozoaires ou animaux mollusques. *Faune Française*, livraison 20. Pp. 81–160, pls. Levrault, Paris.
- Iredale, T. 1929. Queensland molluscan notes, No. 1. *Memoirs of the Queensland Museum*, 9: 261–297.
- Schumacher, C.F. 1817. *Essai d'un nouveau système des habitations des vers testacés...* iv, 287 pp., 22 pls. Copenhagen.

Comment on the proposed conservation of *Laeocochlis* Dunker & Metzger, 1874 (Mollusca, Gastropoda) as the correct spelling (Case 2769; see BZN 48: 27–30, 322–323)

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I write in reply to the comment by Drs Bouchet & Warén (BZN 48: 322–323).

In a draft of my application I argued for the conservation of the spelling *Laiocochlis* Dunker & Metzger, 1874 on the grounds that this was the intended original spelling. I later changed my proposal to conserve the spelling *Laeocochlis* because the original authors had adopted the latter in their subsequent works, and because I believed that this spelling was in accordance with majority usage (see para. 4 on BZN 48: 28). I am therefore delighted that Drs Bouchet & Warén have been able to tip the balance by providing more examples of the usage of *Laiocochlis*. Even though these authors have shown that there have been subsequent usages of the original spelling *Laiocochlis*, I still believe that this name should be suppressed as an incorrect original spelling, but of which name? Usage is actually fairly evenly divided (although Bouchet & Warén have not spoiled their case by giving additional examples of usage of *Laeocochlis*) and, no doubt, reflects nothing more than authors following Thiele (1929) or Wenz (1940), rather than following proper latinization or original (intended) orthography. After agreeing to suppress the earliest spelling *Laiocochlis* (and also the unused spelling *Laeocochlis*) under the plenary powers, the Commission should determine the spelling to be placed on the Official List by a simple majority.

When the valid name for the type species is placed on the Official List to complete the ruling, the name *Cerithium sinistratum* Nyst, 1835 should replace *Triforis macandraeae* A. Adams, 1856 in proposal (3) of para. 6 of my application.

**Comments on the proposed conservation of some generic names first proposed in
Histoire abrégée des insectes qui se trouvent aux environs de Paris (Geoffroy, 1762)
(Crustacea and Insecta)
(Case 2292; see BZN 48: 107–134)**

(1) David R. Ragge

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I have read the relevant parts of Dr Kerzhner's application and shown them to appropriate colleagues. The proposals about *Mantes* Geoffroy and *Mantis* Linnaeus (BZN 48: 113, para. D.3) are entirely reasonable and I am sure will be acceptable to all orthopterists.

(2) R.D. Pope

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I am in full support of Dr Kerzhner's proposals concerning the coleopterous generic names published for the first time in Geoffroy's *Abrégée*. His monumental and very thoroughly researched plan provides the neatest solution to the existing problems concerning Geoffroy's genera. No change in existing taxonomic interpretation is involved and nomenclatural stability will be greatly enhanced when all the names are placed on either the Official Lists or the Official Indexes.

The proposals are a great improvement on Silfverberg's (1978) scheme to use Müller as the 'author' of all Geoffroy's generic names, even those that are used today in taxonomic senses quite different from Geoffroy (see Kerzhner's para. A.7). The cumbersome, and therefore undesirable, attribution 'Geoffroy in Müller' is not needed and, more importantly, it is not necessary to accept Silfverberg's assertion that '... the fact that Müller's [i.e. Geoffroy's] description does not always agree with the genus as subsequently defined is irrelevant'. This kind of statement, even if conforming with the Code, does nothing to improve the status of nomenclature in the eyes of non-taxonomists.

(3) John LaSalle

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The following comment applies to the Hymenoptera name *Eulophus* (see BZN 48: 116, para. H.3).

(1) I am in favour of Kerzhner's proposal concerning the generic name *Eulophus*. His proposal will give credit to the author who proposed this name rather than a subsequent author who merely used the name as Geoffroy intended without critical study or knowledge of this taxon. This proposal would promote stability because, although there is general agreement on usage of the name *Eulophus*, there is presently confusion concerning authorship and type species. However, this proposal needs two minor corrections.

(2) Olivier (1791) should be corrected to Olivier (1792) in reference to the name *Eulophus*. Actual publication dates for the various sections of Olivier's *Encyclopédie*

Méthodique are given by Sherborn & Woodward (1906). For Vol. 6, which includes *Eulophus* on p. 454, pages 1–368 were published in 1791 and pages 369–704 in 1792.

(3) The type species of *Eulophus* should be corrected to be *Ichneumon ramicornis* Fabricius, 1781 by subsequent monotypy by Fabricius (1781, p. 441), not by Olivier (1792). Although Fabricius described *ramicornis* in the genus *Ichneumon*, he used the name *Eulophus* in connection with this species, and made it clear that this species represented *Eulophus* as used by Geoffroy (1762) and DeGeer (1778, p. 200). This makes *Ichneumon ramicornis* the first nominal species assigned to *Eulophus*.

(4) Thus Kerzhner's request (BZN 48: 116, para. H.5) to place *Eulophus* on the Official List of Generic Names should be amended to read:

Eulophus Geoffroy, 1762 (gender: masculine), type species by subsequent monotypy (Fabricius, 1781) *Ichneumon ramicornis* Fabricius, 1781.

(5) I apologise to Dr Kerzhner for not realising that these corrections were necessary and bringing them to his attention prior to his submitting his proposal.

Additional references

DeGeer, C. 1778. *Abhandlungen zur Geschichte der Insekten, aus dem Französischen übersetzt und mit Anmerkungen herausgegeben von J.A.E. Götze*, vol. 2(2), 384 pp. Nürnberg.

Sherborn, C.D. & Woodward, B.B. 1906. On the dates of publication of the natural history portions of the 'Encyclopédie Méthodique'. *Annals and Magazine of Natural History*, (7)17: 577–582.

Comment on the proposed conservation of the specific name of *Artemia franciscana* Kellogg, 1906 (Crustacea, Branchiopoda)

(Case 2728; see BZN 47: 178–183; 48: 57, 246–248)

Denton Belk

Biology Department, Our Lady of the Lake University, 411 S.W. 24th Street, San Antonio, Texas 78207-4666, U.S.A.

I agree with Dr Holthuis (BZN 48: 247) on his point that the Commission needs the support of workers in the field to make a successful resolution of this case. I think comments demonstrate that these workers do support conservation of the specific name *franciscana*. Support comes (see BZN 48: 57) from the highest levels of the leading organizational center for information exchange and training in *Artemia* research, the *Artemia* Reference Center in Gent, Belgium, and from the only recent worker to use one of the older subjective synonyms, Dr Francisco Amat. However, I disagree with Holthuis that 'it is rather senseless to deal with the single species *A. franciscana* and leave the rest as messy as it is now'. It is only in Eurasia and Africa that *Artemia* nomenclature is a mess. In the Americas there exists a stable nomenclature and research is proceeding in an orderly way into the true species status of the taxa. Conservation of the specific name of *Artemia franciscana* as proposed will preserve this desirable situation.

While I agree with Dr Bowman (BZN 48: 247) that Bowen et al. (1978) should have followed the Code and used the oldest available name (*fertilis*), the situation we

are faced with is one in which nomenclatural stability is established and universally accepted by way of the name *franciscana*. It would be a failure of the Code as an instrument for stable nomenclature to upset the existing stability in an effort to correct the error of Bowen et al. (1978).

I should point out for the record that Dr Bowman was mistaken in referring to 'Bowman and Belk's error' since I am not one of the authors of Bowen et al. (1978).

Comment on the proposed conservation of the specific name of *Amphiuma tridactylum* Cuvier, 1827 (Amphibia, Caudata)

(Case 2771; see BZN 48: 238–239)

Hobart M. Smith

EPO Biology, University of Colorado, Boulder, Colorado 80309, U.S.A.

I write to support the application by Harold Dundee to conserve the specific name of *Amphiuma tridactylum* Cuvier, 1827. Approval by the Commission would be a distinct service to biology.

Comment on the proposed conservation of the generic and specific names of *Palaeopropithecus ingens* G. Grandidier, 1899 (Mammalia, Primates)

(Case 2785; see BZN 49: 55–57)

Eric Delson (and 16 others, named below*)

Department of Vertebrate Paleontology, American Museum of Natural History, Central Park West at 79th Street, New York, N.Y. 10024, U.S.A.

We are active researchers and teachers of primate evolution and write to support the application by Tattersall, Simons & Vuillaume-Randriamanantena to conserve the name *Palaeopropithecus ingens* G. Grandidier, 1899 by suppressing its senior subjective synonym *Thaumastolemur grandidier* Filhol, 1895. As clearly stated by the authors, continued usage of the long-accepted name *Palaeopropithecus* is desirable for nomenclatural stability. Resuscitation of the unused name *Thaumastolemur* would engender confusion and add nothing to systematics or nomenclature. We strongly recommend that the Commission rules in favor of the application, and as soon as possible under the Code.

*Glenn Conroy (*Washington University, St Louis*), Herbert H. Covert (*University of Colorado, Boulder*), John G. Fleagle (*State University of New York at Stony Brook*), Dan Gebo (*Northern Illinois University*), Philip Gingerich (*University of Michigan*), Laurie Godfrey (*University of Massachusetts, Amherst*), Nancy Simmons Greenwald (*American Museum of Natural History, New York*), Terry Harrison (*New York University*), Andrew Hill (*Yale University*), Clifford J. Jolly (*New York University*), William Jungers (*State University of New York at Stony Brook*), R.D.E. MacPhee (*American Museum of Natural History*), Mike Rose (*New Jersey Medical School*), Alfred L. Rosenberger (*National Zoological Park, Smithsonian Institution*), Jeffrey Schwartz (*University of Pittsburgh*) and Frederick S. Szalay (*City University of New York, Hunter College*).

OPINION 1662

Limax fibratus Martyn, 1784 and *Nerita hebraea* Martyn, 1786 (currently *Placostylus fibratus* and *Natica hebraea*; Mollusca, Gastropoda): specific names conserved; and *Placostylus* Beck, 1837: *L. fibratus* designated as the type species

Ruling

- (1) Under the plenary powers:
 - (a) the specific name *aurismalchi* Müller, 1774, as published in the binomen *Helix aurismalchi*, is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
 - (b) the following specific names are hereby ruled to be available:
 - (i) *fibratus* Martyn, 1784, as published in the binomen *Limax fibratus*;
 - (ii) *hebraea* Martyn, 1786, as published in the binomen *Nerita hebraea*;
 - (c) all previous fixations of type species for the nominal genus *Placostylus* Beck, 1837 are hereby set aside and *Limax fibratus* Martyn, 1784 is designated as the type species.
- (2) The name *Placostylus* Beck, 1837 (gender: masculine), type species by designation under the plenary powers in (1)(c) above *Limax fibratus* Martyn, 1784, is hereby placed on the Official List of Generic Names in Zoology.
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *fibratus* Martyn, 1784, as published in the binomen *Limax fibratus* (specific name of the type species of *Placostylus* Beck, 1837);
 - (b) *hebraea* Martyn, 1786, as published in the binomen *Nerita hebraea*.
- (4) The following names are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology:
 - (a) *aurismalchi* Müller, 1774, as published in the binomen *Helix aurismalchi* and suppressed in (1)(a) above;
 - (b) *elongata* Lightfoot, 1786, as published in the binomen *Voluta elongata* (a junior objective synonym of *Limax fibratus* Martyn, 1784).

History of Case 2641

An application for the conservation of the specific names of *Limax fibratus* Martyn, 1784 and *Nerita hebraea* Martyn, 1786, and the designation of *L. fibratus* as the type species of *Placostylus* Beck, 1837, was received from Dr Philippe Bouchet (*Muséum National d'Histoire Naturelle, Paris, France*) on 5 February 1988. After correspondence the case was published in BZN 47: 12–18 (March 1990). Notice of the case was sent to appropriate journals.

An opposing comment from Dr R. Tucker Abbott (*American Malacologists, Inc., Melbourne, Florida, U.S.A.*) was published in BZN 47: 202 (September 1990), together with a reply by the author of the application and a comment in support from Dr Riccardo Giannuzzi-Savelli (*Società Italiana di Malacologia, Milan, Italy*). A comment by Mrs Anthea Gentry (*Secretariat, ICZN*) on the status of Martyn's (1784–1787) work *The universal conchologist* was published at the same time.

Comments in support from Drs Anders Warén (*Naturhistoriska Riksmuseet, Stockholm, Sweden*) and from Simon Tillier (*Muséum National d'Histoire Naturelle, Paris, France*) were published in BZN 48: 54 (March 1991).

It was noted on the voting paper that in November 1990 Dr Bouchet passed to the Secretariat a copy of a message he had received from Dr Tucker Abbott. The latter wrote that he acquiesced over Martyn's work and that he would in future use the name *Placostylus fibratus* (Martyn, 1784). He also wrote 'the earliest name may be *Helix aurismalchi* Müller, 1774, based on Spengler's specimen (from New Caledonia, fide Chemnitz)* (see BZN 47: 13, para. 3). Dr Bouchet commented (in litt.) that his objection to the name *aurismalchi*, unused since 1848, was similar to that for *Bulimus bovinus* Bruguière (see BZN 47: 202), namely that Müller could not have described in Europe in 1774 a shell from New Caledonia when this island was discovered by Cook in the same year.

Decision of the Commission

On 1 September 1991 the members of the Commission were invited to vote on the proposals published in BZN 47: 15–16. At the close of the voting period on 1 December 1991 the votes were as follows:

Affirmative votes — 24: Bayer, Bock, Cocks, Corliss, Dupuis, Hahn, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 1: Halvorsen.

No votes were received from Cogger and Starobogatov.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

aurismalchi, *Helix*, Müller, 1774, *Vermium Terrestrium et Fluviatilium...*, vol. 2, p. 112.

elongata, *Voluta*, Lightfoot, 1786, *A catalogue of the Portland Museum...*, p. 30.

fibratus, *Limax*, Martyn, 1784, *The universal conchologist...*, vol. 1, pl. 25.

hebraea, *Nerita*, Martyn, 1786, *The universal conchologist...*, vol. 3, pl. 109.

Placostylus Beck, 1837, *Index Molluscorum praesentis aevi Musei Principis Augustissimi Christiani Frederici*, p. 57.

OPINION 1663

Fryeria* Gray, 1853 and *F. rueppelii* Bergh, 1869 (Mollusca, Gastropoda): conserved*Ruling**

(1) Under the plenary powers:

- (a) the specific name *pustulosa* Gray, 1853, as published in the binomen *Fryeria pustulosa*, is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (b) all fixations of type species for the nominal genus *Fryeria* Gray, 1853 are hereby set aside and *Fryeria rueppelii* Bergh, 1869 is designated as the type species.

(2) The name *Fryeria* Gray, 1853 (gender: feminine), type species by designation in (1)(b) above *Fryeria rueppelii* Bergh, 1869, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *rueppelii* Bergh, 1869, as published in the binomen *Fryeria rüppelii* (specific name of the type species of *Fryeria* Gray, 1853), is hereby placed on the Official List of Specific Names in Zoology.

(4) The name *Reyfriedi* Yonow, 1986 is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology (a junior objective synonym of *Fryeria* Gray, 1853).

(5) The following names are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology:

- (a) *pustulosa* Gray, 1853, as published in the binomen *Fryeria pustulosa* and as suppressed in (1)(a) above;
- (b) *rüppelii* Bergh, 1869, as published in the binomen *Fryeria rüppelii* (an incorrect original spelling of *rueppelii* Bergh, 1869).

History of Case 2682

An application for the conservation of *Fryeria* Gray, 1853 and *F. rueppelii* Bergh, 1869 was received from Drs D.J. Brunckhorst (*University of Queensland, St. Lucia, Queensland, Australia*), W.B. Rudman (*The Australian Museum, Sydney South, New South Wales, Australia*) and R.C. Willan (*University of Queensland, St. Lucia, Queensland, Australia*) on 28 September 1988. After correspondence the case was published in BZN 46: 161–164 (September 1989). Notice of the case was sent to appropriate journals.

Comments from Prof L.B. Holthuis (*Nationaal Natuurhistorisch Museum, Leiden, The Netherlands*) and from Mr Robert Burn (*Geelong, Victoria, Australia*), together with a reply by the authors of the application, were published in BZN 47: 288–290 (December 1990). Mr Burn considered that use of the name *pustulosa* Gray, 1853 for the type species of *Fryeria* would not cause confusion, so he opposed proposal (1)(a) on BZN 46: 163. Prof Holthuis suggested that this proposal was unnecessary because, in his view, *pustulosa* Gray was not available under Article 11i of the Code. The authors did not accept this and maintained their proposal that the name of the nominal type species of *Fryeria* should be ruled to be *Fryeria rueppelii* Bergh, 1869.

Decision of the Commission

On 1 September 1991 the members of the Commission were invited to vote on the proposals published in BZN 46: 163. At the close of the voting period on 1 December 1991 the votes were as follows:

Affirmative votes — 18: Bock, Cocks, Corliss, Hahn, Halvorsen, Heppell, Holthuis (in part), Kraus, Mahnert, Martins de Souza, Nielsen, Nye, Ride, Starobogatov, Thompson (in part), Trjapitzin, Uéno, Willink

Negative votes — 8: Bayer, Dupuis, Kabata, Lehtinen, Macpherson, Minelli, Savage and Schuster. -

No vote was received from Cogger.

Holthuis and Thompson did not vote for proposals 1(a) and 5(a).

Original references

The following are the original references to the names placed on Official Lists and Official Indexes by the ruling given in the present Opinion:

Fryeria Gray, 1853, *Annals and Magazine of Natural History*, (2)11: 221.

pustulosa, *Fryeria*, Gray, 1853, *Annals and Magazine of Natural History*, (2)11: 221.

Reyfria Yonow, 1986, *Journal of Natural History*, 20: 1418.

rueppelii, *Fryeria*, Bergh, 1869, *Naturhistorisk Tidsskrift, Kjøbenhavn*, (3)5: 514.

rüppelii, *Fryeria*, Bergh, 1869, *Naturhistorisk Tidsskrift, Kjøbenhavn*, 3(5): 514.

OPINION 1664

RISSOIDAE Gray, 1847 (Mollusca, Gastropoda): given precedence over TRUNCATELLIDAE Gray, 1840

Ruling

(1) Under the plenary powers RISSOIDAE Gray, 1847 and other family-group names based on *Rissoa* Desmarest, 1814 are hereby given precedence over TRUNCATELLIDAE Gray, 1840 and other family-group names based on *Truncatella* Risso, 1826 whenever their type genera are placed in the same family-group taxon.

(2) The name RISSOIDAE Gray, 1847 (type genus *Rissoa* Desmarest, 1814) is hereby placed on the Official List of Family-Group Names in Zoology, with the endorsement that it and other family-group names based on *Rissoa* are to be given precedence over TRUNCATELLIDAE Gray, 1840 (type genus *Truncatella* Risso, 1826) and other family-group names based on *Truncatella* whenever their type genera are placed in the same family-group taxon.

(3) To the entry for TRUNCATELLIDAE Gray, 1840 on the Official List of Family-Group Names in Zoology is hereby added the endorsement that it and other family-group names based on *Truncatella* Risso, 1826 are not to be given priority over RISSOIDAE Gray, 1847 and other family-group names based on *Rissoa* Desmarest, 1814 whenever their type genera are placed in the same family-group taxon.

(4) The entry for BITHYNIIDAE Gray, 1857 on the Official List of Family-Group Names in Zoology is hereby amended to give Troschel (1857) as the author of the name.

(5) The name *Rissoa* Desmarest, 1814, type species by subsequent designation by Bucquoy, Dautzenberg & Dollfus (1884) *Rissoa ventricosa* Desmarest, 1814, is hereby placed on the Official List of Generic Names in Zoology.

(6) The entry for *Truncatella* Risso, 1826 on the Official List of Generic Names in Zoology is hereby amended to state that its type species by subsequent designation by Lowe (1855) is *Truncatella costulata* Risso, 1826 (a junior subjective synonym of *Helix subcylindrica* Linnaeus, 1767).

(7) The name *ventricosa* Desmarest, 1814, as published in the binomen *Rissoa ventricosa* (specific name of the type species of *Rissoa* Desmarest, 1814), is hereby placed on the Official List of Specific Names in Zoology.

(8) The entry on the Official List of Specific Names in Zoology for *subcylindrica*, *Helix*, Linnaeus, 1767 is hereby amended to state that it is the senior subjective synonym of *Truncatella costulata* Risso, 1826, the type species of *Truncatella* Risso, 1826.

History of Case 2699

An application for the conservation of the family-group name RISSOIDEA (or RISSOACEA) Gray, 1847 by giving it precedence over TRUNCATELLOIDEA (or TRUNCATELLACEA) Gray, 1840 was received from Drs G. Rosenberg & G.M. Davis (*Academy of Natural Sciences, Philadelphia, Pennsylvania, U.S.A.*) on 28 December 1988. After correspondence the case was published in BZN 47: 104–109 (June 1990). Notice of the case was sent to appropriate journals. In relation to the proposed placement of HYDROBIIDAE Troschel, 1857 on the Official List (proposal (4) on BZN 47: 107),

a comment from Drs Alfred F. Newton & Margaret K. Thayer (*Field Museum of Natural History, Chicago, Illinois, U.S.A.*), published in BZN 47: 286–287 (December 1990), pointed out that this family-group name is a junior homonym of HYDROBIIDAE Mulsant, 1844 (type genus *Hydrobius* Leach, 1815), a name currently in use in the Insecta (Coleoptera). Dr Rosenberg, one of the authors of the application, noted (in litt.) that HYDROBIIDAE in molluscs is a well known large family of some 100 genera and more than 1,000 species and that a name change 'would cause great confusion'. The status of the name HYDROBIIDAE Troschel, 1857 did not affect the application on the relative precedence of the senior names RISSOIDAE and TRUNCATELLOIDAE and, since objection could be made to placing a junior homonym on an Official List of Names, proposal (4) on BZN 47: 107 was withdrawn. It should be noted that HYDROBIIDAE Troschel should remain in use, even though a junior homonym, in the absence of a Commission ruling resolving its homonymy. References to HYDROBIIDAE and to *Hydrobia* Hartmann, 1821 and its type species have been withdrawn from the present case because further consideration is necessary. Proposal (10) on BZN 47: 107 was also withdrawn; it is not normal practice to place nomina nuda on the Official Indexes and there was no reason to do so in this case. The application noted (BZN 47: 105, para. 8) that the citation of the type species of *Truncatella* in Opinion 344 (1955) was wrong, and that the Official List entry needed correction.

Decision of the Commission

On 1 September 1991 the members of the Commission were invited to vote on the proposals published in BZN 47: 106–107, with the withdrawals noted above. At the close of the voting period on 1 December 1991 the votes were as follows:

Affirmative votes — 22: Bayer, Bock, Cocks, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 4: Lehtinen, Macpherson, Schuster and Starobogatov.

No vote was received from Cogger.

Starobogatov commented that in his view [cf. BZN 47: 105, para. 4] consideration of the relative precedence of RISSOIDAE and TRUNCATELLIDAE was 'the same as the discussion of relative priority of CANIDAE against FELIDAE'.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

BITHYNIIDAE Troschel, 1857, *Das Gebiss der Schnecken zur Begründung einer natürlich Classification*, vol. 1(2), p. 101.

Rissoa Desmarest, 1814, *Bulletin des Sciences, par la Société Philomatique de Paris*, (3)1: 7.

RISSOIDAE Gray, 1847, *Proceedings of the Zoological Society of London*, 15: 152.

subcylindrica, *Helix*, Linnaeus, 1767, *Systema Naturae*, Ed. 12, vol. 1(2), p. 1248.

Truncatella Risso, 1826, *Histoire naturelle des principales productions de l'Europe méridionale et particulièrement de celles des environs de Nice et des Alpes Maritimes*, vol. 4, p. 124.

TRUNCATELLIDAE Gray, 1840, *Synopsis of the contents of the British Museum*, Ed. 42, p. 117.

ventricosa, *Rissoa*, Desmarest, 1814, *Bulletin des Sciences, par la Société Philomatique de Paris*, (3)1: 8.

The following is the reference for the designation of *Rissoa ventricosa* Desmarest, 1814 as the type species of the nominal genus *Rissoa* Desmarest, 1814:

Bucquoy, E., Dautzenberg, P. & Dollfus, G.-F. 1884. *Les mollusques marins de Roussillon*, vol. 1, part 7, p. 262.

The following is the reference for the designation of *Truncatella costulata* Risso, 1826 (a junior subjective synonym of *Helix subcylindrica* Linnaeus, 1767) as the type species of the nominal genus *Truncatella* Risso, 1826:

Lowe, R.T. 1855. *Proceedings of the Zoological Society of London*, **22**: 217.

OPINION 1665

Potamilus Rafinesque, 1818 (Mollusca, Bivalvia): not suppressed

Ruling

(1) The name *Potamilus Rafinesque, 1818* (gender: masculine), type species by subsequent designation by Morrison (1969) *Unio alatus* Say, 1817, is hereby placed on the Official List of Generic Names in Zoology.

(2) The name *alatus* Say, 1817, as published in the binomen *Unio alatus* (specific name of the type species of *Potamilus Rafinesque, 1818*), is hereby placed on the Official List of Specific Names in Zoology.

(3) The name *Proptera Rafinesque, 1819* is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology (a junior objective synonym of *Potamilus Rafinesque, 1818*).

History of Case 2558

An application for the conservation of *Proptera Rafinesque, 1819* was received from Dr Mark E. Gordon (*Tennessee Cooperative Fishery Research Unit, Cookeville, Tennessee, U.S.A.*) on 23 November 1987. After correspondence the case was published in BZN 47: 19–21 (March 1990). Notice of the case was sent to appropriate journals.

A comment in support from Dr Arthur H. Clarke (*Ecosearch Inc., Portland, Texas, U.S.A.*) was published in BZN 47: 205–206 (September 1990), together with an opposing comment from Drs Arthur E. Bogan (*Academy of Natural Sciences, Philadelphia, Pennsylvania, U.S.A.*), James D. Williams (*U.S. Fish and Wildlife Service, Gainesville, Florida, U.S.A.*) & Samuel L.H. Fuller (*Florida State Museum of Natural History, Gainesville, U.S.A.*). A further comment in support from Dr Douglas G. Smith (*Museum of Zoology, University of Massachusetts, Amhurst, U.S.A.*) was published in BZN 48: 142–143 (June 1991).

It was noted on the voting paper that, although no species were included in *Potamilus Rafinesque, 1818* for 150 years, as a result of Morrison's 1969 statement (see BZN 47: 19, para. 5) it became a senior objective synonym of *Proptera Rafinesque, 1819* (the type species of both nominal genera is *Unio alatus* Say, 1817). Bogan, Williams & Fuller noted (BZN 47: 206–207) that *Potamilus* had had extensive recent use and considered that it would therefore be a mistake to suppress it. Instead of the proposals on BZN 47: 20, which sought to suppress *Potamilus* and place *Proptera* on the Official List, Bogan et al. proposed that *Potamilus* should be confirmed as the valid name for the genus.

Both alternatives, the original proposal for the conservation of *Proptera Rafinesque, 1819* by the suppression of *Potamilus Rafinesque, 1818* (BZN 47: 20; Proposal A), and the placement of *Potamilus Rafinesque, 1818* on the Official List (BZN 47: 207; Proposal B), were offered for voting. The first course involved the use of the Commission's plenary powers, but these were not required for the second course since it did not involve the suppression of names.

Decision of the Commission

On 1 September 1991 the members of the Commission were invited to vote. At the close of the voting period on 1 December 1991 the votes were as follows:

Proposal A — 8: Bock, Corliss, Dupuis, Kraus, Minelli, Nielsen, Starobogatov, Uéno.

Proposal B — 18: Bayer, Cocks, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Lehtinen, Macpherson, Mahnert, Martins de Souza, Nye, Ride, Savage, Schuster, Thompson, Trjapitzin and Willink

No vote was received from Cogger.

Voting for proposal B, Hahn commented: 'As the comments clearly show, specialists do not agree in this case. *Proptera* Rafinesque, 1819 is apparently not more often used than *Potamilus* Rafinesque, 1818. In such a situation the best way is to follow the Code and retain the older name'. Martins de Souza commented: 'As both names, *Potamilus* and *Proptera* are being used, I vote for the adoption of the Principle of Priority'. Nye commented: '*Potamilus* is clearly not an unused senior synonym. Each synonym is in current use so priority should be the arbiter'.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

alatus, *Unio*, Say, 1817, in Nicholson, W., *First American edition of the British Encyclopedia or dictionary of arts and sciences*, vol. 2 (B–E), pl. 4, fig. 2.

Potamilus Rafinesque, 1818, *American Monthly Magazine and Critical Review*, 3: 355.

Proptera Rafinesque, 1819, *Journal de Physique, de Chimie, d'Histoire Naturelle*, 88: 420.

The following is the reference for the designation of *Unio alatus* Say, 1817 as the type species of the nominal genus *Potamilus* Rafinesque, 1818:

Morrison, J.P.E. 1969. *Annual Reports of the American Malacological Union*, 1969: 24

The following is the reference for the designation of *Unio alatus* Say, 1817 as the type species of the nominal genus *Proptera* Rafinesque, 1819:

Herrmannsen, A.N. 1847. *Indices generum malacozoorum primordia*, vol. 2, p. 41.

OPINION 1666

Aphrodita imbricata Linnaeus, 1767 (currently *Harmothoe imbricata*)
and *Aphrodita minuta* Fabricius, 1780 (currently *Pholoe minuta*)
(Annelida, Polychaeta): specific names conserved

Ruling

- (1) Under the plenary powers the following specific names are hereby suppressed:
 - (a) *lepidota* Pallas, 1766, as published in the binomen *Aphrodita lepidota*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
 - (b) *minuta* Pennant, 1777, as published in the binomen *Aphrodita minuta*, and all other uses of this name before the publication of *A. minuta* Fabricius, 1780, for the purposes of both the Principle of Priority and the Principle of Homonymy.
- (2) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *imbricata* Linnaeus, 1767, as published in the binomen *Aphrodita imbricata*;
 - (b) *minuta* Fabricius, 1780, as published in the binomen *Aphrodita minuta*.
- (3) The following names are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology:
 - (a) *lepidota* Pallas, 1766, as published in the binomen *Aphrodita lepidota* and as suppressed in (1)(a) above;
 - (b) *minuta* Pennant, 1777, as published in the binomen *Aphrodita minuta* and as suppressed in (1)(b) above.

History of Case 2452

An application for the conservation of the specific names of *Aphrodita imbricata* Linnaeus, 1767 and *A. minuta* Fabricius, 1780 was received from Dr Susan Chambers and Mr David Heppell (*National Museums of Scotland, Edinburgh, U.K.*) on 30 September 1983. The case was held pending proposed taxonomic revisions and was eventually published in BZN 46: 22–24 (March 1989). Notice of the case was sent to appropriate journals.

A comment from Dr Mary E. Petersen (*Zoological Museum, University of Copenhagen, Denmark*), published in BZN 47: 207–209 (September 1990), supported the conservation of *Aphrodita minuta* Fabricius, 1780 by suppressing the earlier unused homonym *A. minuta* Pennant, 1777, but preferred the name *Aphrodita imbricata* Linnaeus, 1767 to be given precedence over *A. lepidota* Pallas, 1766, rather than the proposed suppression of the latter name. A reply by the authors of the application was published at the same time.

Dr Petersen considered that leaving the name *A. lepidota* available for possible future use would be advantageous since it was almost certain that revision of *A. imbricata* would result in that nominal species being split. While agreeing the latter point, Dr Chambers & Mr Heppell noted that, in the absence of type material, the name *lepidota* Pallas, 1766 could not be applied with confidence.

Decision of the Commission

On 1 September 1991 the members of the Commission were invited to vote on the proposals published in BZN 46: 23. At the close of the voting period on 1 December 1991 the votes were as follows:

Affirmative votes — 22: Bock, Cocks, Corliss, Hahn, Halvorsen, Heppell, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli (in part), Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Trjapitzin, Uéno, Willink

Negative votes — 3: Bayer, Minelli (in part) and Thompson.

Dupuis and Holthuis abstained.

No vote was received from Cogger.

Minelli voted for the suppression of *Aphrodita minuta* Pennant, 1777 but not for the suppression of *A. lepidota* Pallas, 1766. Dupuis commented: 'Pending a better taxonomic knowledge of the genus I think it is premature to decide the case from a mere nomenclatural point of view'. Holthuis, Minelli, Ride and Thompson expressed support for the course suggested by Dr Petersen, namely that the name *imbricata* be given precedence over *lepidota*. The Executive Secretary consulted Dr Nielsen (University of Copenhagen) on this point; he replied (in agreement with Chambers & Heppell, BZN 47: 210) that Pallas's name could not be appropriately assigned to any particular taxon which might be differentiated from *imbricata*.

Original references

The following are the original references to the names placed on an Official List and an Official Index by the ruling given in the present Opinion:

imbricata, *Aphrodita*, Linnaeus, 1767, *Systema Naturae*, Ed. 12, vol. 1(2), p. 1084.

lepidota, *Aphrodita*, Pallas, 1766, *Miscellanea Zoologica*, p. 94.

minuta, *Aphrodita*, O. Fabricius, 1780, *Fauna Groenlandica*, p. 314.

minuta, *Aphrodita*, Pennant, 1777, *British Zoology*, Ed. 4, vol. 4, p. 38 (quarto edition).

OPINION 1667

***Thalassochernes* Beier, 1940 (Arachnida, Pseudoscorpionida): *Chelifer taierensis* With, 1907 designated as the type species**

Ruling

(1) Under the plenary powers all previous designations of type species for the nominal genus *Thalassochernes* Beier, 1940 are hereby set aside and *Chelifer taierensis* With, 1907 is designated as type species of the genus.

(2) The name *Thalassochernes* Beier, 1940 (gender: masculine), type species by designation under the plenary powers in (1) above *Chelifer taierensis* With, 1907, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *taierensis* With, 1907, as published in the binomen *Chelifer taierensis* (specific name of the type species of *Thalassochernes* Beier, 1940), is hereby placed on the Official List of Specific Names in Zoology.

History of Case 2734

An application for the designation of *Chelifer taierensis* With, 1907 as the type species of *Thalassochernes* Beier, 1940 was received from Dr Mark S. Harvey (*Western Australian Museum, Perth, Australia*) on 27 July 1989. After correspondence the case was published in BZN 47: 176–177 (September 1990). Notice of the case was sent to appropriate journals. No comments were received.

Decision of the Commission

On 1 September 1991 the members of the Commission were invited to vote on the proposals published in BZN 47: 177. At the close of the voting period on 1 December 1991 the votes were as follows:

Affirmative votes — 26: Bayer, Bock, Cocks, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Thompson, Trjapitzin, Uéno, Willink

Negative votes — none.

No vote was received from Cogger.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

taierensis, *Chelifer*, With, 1907, *Journal of the Linnean Society, Zoology*, **30**: 55.

Thalassochernes, Beier, 1940, *Zoologische Jahrbücher, Abteilung für Systematik, Ökologie und Geographie der Tiere*, **74**: 182.

OPINION 1668

***Bathynomus* A. Milne Edwards, 1879 (Crustacea, Isopoda): given precedence over *Palaega* Woodward, 1870**

Ruling

(1) Under the plenary powers the generic name *Bathynomus* A. Milne Edwards, 1879 is hereby given precedence over the name *Palaega* Woodward, 1870 whenever the two names are considered to be synonyms.

(2) The following names are hereby placed on the Official List of Generic Names in Zoology:

(a) *Bathynomus* A. Milne Edwards, 1879 (gender: masculine), type species by monotypy *Bathynomus giganteus* A. Milne Edwards, 1879, with the endorsement that it is to be given precedence over *Palaega* Woodward, 1870 whenever the two names are considered to be synonyms;

(b) *Palaega* Woodward, 1870 (gender: feminine), type species by monotypy *Palaega carteri* Woodward, 1870, with the endorsement that it is not to be given priority over the name *Bathynomus* A. Milne Edwards, 1879 whenever the two names are considered to be synonyms.

(3) The following names are hereby placed on the Official List of Specific Names in Zoology:

(a) *giganteus* A. Milne Edwards, 1879, as published in the binomen *Bathynomus giganteus* (specific name of the type species of *Bathynomus* A. Milne Edwards, 1879);

(b) *carteri* Woodward, 1870, as published in the binomen *Palaega carteri* (specific name of the type species of *Palaega* Woodward, 1870).

History of Case 2721

An application to give the generic name *Bathynomus* A. Milne Edwards, 1879 precedence over *Palaega* Woodward, 1870 was received from Drs Joel W. Martin & Hans G. Kuck (*Natural History Museum of Los Angeles County, Los Angeles, California, U.S.A.*) on 7 April 1989. After correspondence the case was published in BZN 47: 27–29 (March 1990). Notice of the case was sent to appropriate journals.

A comment in support from Prof Jacques Forest (*Muséum National d'Histoire Naturelle, Paris, France*) was published in BZN 47: 212–213 (September 1990). An opposing comment from Prof Rodney M. Feldmann (*Kent State University, Kent, Ohio, U.S.A.*) was published in BZN 47: 290–291 (December 1990). Prof Feldmann accepted the subjective synonymy of *Palaega* Woodward, 1870 and *Bathynomus* Milne Edwards, 1879, and pointed out that there is no provision requiring that names based on living taxa should have precedence over those (such as *Palaega*) based on fossils.

Comments on the application were published in BZN 47: 291–293 from six members of the Nomenclature Committee of The Crustacean Society (Drs Gary C.B. Poore, *Museum of Victoria, Abbotsford, Australia* & Keiji Baba, *Kumamoto University Faculty of Education, Kumamoto, Japan*; Prof J.Y. Liu, *Institute of Oceanology, Qindao, People's Republic of China*; Prof L.B. Holthuis, *Nationaal Natuurhistorisch Museum, Leiden, The Netherlands*; and Dr Thomas E. Bowman and Dr Austin B. Williams, *National Museum of Natural History, Smithsonian Institution, Washington D.C.*,

U.S.A.). None of these comments opposed the application, and they expressed doubts about *Palaega carteri*, the type species of *Palaega*, being congeneric with *Bathynomus giganteus*. Poore & Baba, Liu and Holthuis were willing to support the application while Bowman and Williams said it was unnecessary.

Comments from Prof Sergio de Almeida Rodrigues (*Universidade de São Paulo, São Paulo, Brazil*) and Dr Neil L. Bruce (*Queensland Museum, South Brisbane, Australia*) supporting the precedence of *Bathynomus* were published in BZN 48: 57–58 (March 1991).

Decision of the Commission

On 1 September 1991 the members of the Commission were invited to vote on the proposals published in BZN 47: 28. At the close of the voting period on 1 December 1991 the votes were as follows:

Affirmative votes — 22: Bayer, Bock, Cocks, Corliss, Dupuis, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Thompson, Trjapitzin, Uëno, Willink

Negative votes — 4: Hahn, Halvorsen, Heppell and Martins de Souza.

No vote was received from Cogger.

Voting for, Cocks and Minelli agreed with the comments by members of the Nomenclature Committee of The Crustacean Society. Ride commented: 'From the comments it is clear that *Palaega carteri* will be regarded as a *nomen dubium* by some and hence a cause of instability while *Palaega* remains senior to *Bathynomus*. In the status proposed, *Palaega* can be used as a collective group name or a generic name without compromising stability'. Voting against, Hahn commented: '*Palaega* is of similar importance for palaeontologists as *Bathynomus* for neontologists, therefore I see no reason to give precedence to *Bathynomus* over *Palaega*'. Martins de Souza wrote: 'Comments by Bowman, Bruce, Holthuis and Williams have indicated that *Palaega carteri* is not congeneric with *Bathynomus giganteus*'; he therefore saw no reason to give precedence to *Bathynomus*.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

Bathynomus A. Milne Edwards, 1879, *Comptes Rendus de l'Académie des Sciences*, Paris, 88: 21.
carteri, *Palaega*, Woodward, 1870, *Geological Magazine*, 7: 496.

giganteus, *Bathynomus*, A. Milne Edwards, 1879, *Comptes Rendus de l'Académie des Sciences*, Paris, 88: 21.

Palaega Woodward, 1870, *Geological Magazine*, 7: 496.

OPINION 1669

Dalla Mabilie, 1904 (Insecta, Lepidoptera): conserved

Ruling

(1) Under the plenary powers the generic name *Eumesia* Felder & Felder, [1867] is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The name *Dalla* Mabilie, 1904 (gender: feminine), type species by subsequent designation by Lindsey (1921) *Cyclopides eryonas* Hewitson, 1877, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *eryonas* Hewitson, 1877, as published in the binomen *Cyclopides eryonas* (specific name of the type species of *Dalla* Mabilie, 1904), is hereby placed on the Official List of Specific Names in Zoology.

(4) The name *Eumesia* Felder & Felder, [1867], as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

(5) The name EUMESIIDAE (type genus *Eumesia* Felder & Felder, [1867]) (name of the type genus suppressed in (1) above) is hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology.

History of Case 2720

An application for the conservation of the name *Dalla* Mabilie, 1904 was received from Drs Stephen R. Steinhauser, Lee D. Miller & Jacqueline Y. Miller (*Allyn Museum of Entomology, Sarasota, Florida, U.S.A.*) and Charles A. Bridges (*Urbana, Illinois, U.S.A.*) on 29 March 1989. After correspondence the case was published in BZN 47: 184–186 (September 1990). Notice of the case was sent to appropriate journals. No comments were received. It was noted on the voting paper that approximately 120 nominal taxa (species and subspecies) are currently placed in the genus which, with the exceptions noted in the application, has always been called *Dalla*.

Decision of the Commission

On 1 September 1991 the members of the Commission were invited to vote on the proposals published in BZN 47: 185–186. At the close of the voting period on 1 December 1991 the votes were as follows:

Affirmative votes — 25: Bayer, Bock, Cocks, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Trjapitzin, Uéno, Willink

Negative votes — 1: Thompson.

No vote was received from Cogger.

Original references

The following are the original references to the names placed on Official Lists and Official Indexes by the ruling given in the present Opinion:

Dalla Mabilie, 1904, *Genera Insectorum*, 17: 107.

eryonas, *Cyclopides*, Hewitson, 1877, *Annals and Magazine of Natural History*, (4)20: 325.

Eumesia Felder & Felder, [1867], *Reise der Österreichischen Fregatte 'Novara' um die Erde*, p. 504.

EUMESIIDAE Felder & Felder, [1867], *Reise der Österreichischen Fregatte 'Novara' um die Erde*, p. 504.

The following is the reference for the designation of *Cyclopides eryonas* Hewitson, 1877 as the type species of the nominal genus *Dalla* Mabille, 1904:

Lindsey, A.W. 1921. *University of Iowa Studies in Natural History*, 9(4): 58.

OPINION 1670

Calliphora vicina Robineau-Desvoidy, 1830 (Insecta, Diptera): specific name conserved

Ruling

(1) Under the plenary powers the specific name *carnivora* Fabricius, 1794, as published in the binomen *Musca carnivora*, is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The name *vicina* Robineau-Desvoidy, 1830, as published in the binomen *Calliphora vicina*, is hereby placed on the Official List of Specific Names in Zoology.

(3) The following names are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology:

(a) *carnivora* Fabricius, 1794, as published in the binomen *Musca carnivora* and as suppressed in (1) above;

(b) *erythrocephala* Meigen, 1826, as published in the binomen *Musca erythrocephala* (a junior primary homonym of *Musca erythrocephala* DeGeer, 1776).

History of Case 2712

An application for the conservation of the specific name of *Calliphora vicina* Robineau-Desvoidy, 1830 was received from Drs Knut Rognes (Stavanger Laerhogskole, Stavanger, Norway) and Robert E. Blackith (University of Dublin, Ireland) on 20 February 1989. After correspondence the case was published in BZN 47: 187–189 (September 1990). Notice of the case was sent to appropriate journals. No comments were received. As noted on BZN 47: 189, the application was supported by Dr A.C. Pont (formerly of The Natural History Museum, London, U.K.).

Attention is drawn to the invalidity of the specific name *erythrocephala* Meigen, 1826, which is still sometimes used for *Calliphora vicina*.

Decision of the Commission

On 1 September 1991 the members of the Commission were invited to vote on the proposals published in BZN 47: 188–189. At the close of the voting period on 1 December 1991 the votes were as follows:

Affirmative votes — 24: Bayer, Bock, Cocks, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Macpherson, Mahnert, Martins de Souza, Minelli, Nye, Ride, Savage, Schuster, Starobogatov, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 2: Lehtinen and Nielsen.

No vote was received from Cogger.

Original references

The following are the original references to the names placed on an Official List and an Official Index by the ruling given in the present Opinion:

carnivora, *Musca*, Fabricius, 1794, *Entomologia systematica emendata et aucta...*, vol. 4, p. 313.
erythrocephala, *Musca*, Meigen, 1826, *Systematische Beschreibung der bekannten europäischen zweiflügeligen Insekten*, vol. 5, p. 62.

vicina, *Calliphora*, Robineau-Desvoidy, 1830, *Mémoires présentés par divers savants à l'Académie des Sciences de l'Institut de France*, (2)2: 435.

OPINION 1671

Strophomena de Blainville, 1824 (Brachiopoda): *Leptaena planumbona* Hall, 1847 designated as the type species

Ruling

- (1) Under the plenary powers:
 - (a) all previous designations of type species for the nominal genus *Strophomena* de Blainville, 1824 are hereby set aside and *Leptaena planumbona* Hall, 1847 is designated as the type species;
 - (b) the specific name *rugosa* de Blainville, 1824, as published in the binomen *Strophomena rugosa*, is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.
- (2) The name *Strophomena* de Blainville, 1824 (gender: feminine), type species by designation in (1)(a) above *Leptaena planumbona* Hall, 1847, is hereby placed on the Official List of Generic Names in Zoology.
- (3) The name *planumbona* Hall, 1847, as published in the binomen *Leptaena planumbona* (specific name of the type species of *Strophomena* de Blainville, 1824) is hereby placed on the Official List of Specific Names in Zoology.
- (4) The name *rugosa* de Blainville, 1824, as published in the binomen *Strophomena rugosa* and as suppressed in (1)(b) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 2747

An application for the designation of *Leptaena planumbona* Hall, 1847 as the type species of *Strophomena* de Blainville, 1824 was received from Dr L.R.M. Cocks (*The Natural History Museum, London, U.K.*) on 10 November 1989. After correspondence the case was published in BZN 47: 274-276 (December 1990). Notice of the case was sent to appropriate journals. Comments in support from Dr A.W.A. Rushton (*British Geological Survey, Keyworth, Nottinghamshire, U.K.*) and from Sir Alwyn Williams (*The University, Glasgow, U.K.*) were published in BZN 48: 54 (March 1991). A further comment in support from Dr C.H.C. Brunton (*The Natural History Museum, London, U.K.*) was noted on the voting paper.

In the application the names *Strophomena* and *rugosa* were attributed to de Blainville's *Manuel de Malacologie* of 1825 (see BZN 47: 274, para. 3) but it subsequently became apparent (see below) that they had previously been published in 1824.

Decision of the Commission

On 1 September 1991 the members of the Commission were invited to vote on the proposals published in BZN 47: 275-276. At the close of the voting period on 1 December 1991 the votes were as follows:

Affirmative votes — 26: Bayer, Bock, Cocks, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Thompson, Trjapitzin, Uéno, Willink

Negative votes — none.

No vote was received from Cogger.

Heppell commented: 'The genera (including the new genera) included by de Blainville in his *Manuel de Malacologie* (1825) were also published by him in the alphabetically arranged sequence of the second edition of the *Dictionnaire des Sciences Naturelles*. This predates the *Manuel* at least as far as volume 32 (November 1824), and so the generic name *Strophomena* and the specific name *rugosa* should be dated from their first publication on p. 302 of that volume, and not from 1825 as given in the application'.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

planumbona, *Leptaena*, Hall, 1847, *Natural History of New York*, p. 112.

rugosa, *Strophomena*, de Blainville, 1824, *Dictionnaire des Sciences Naturelles*, Ed. 2, vol. 32, p. 302.

Strophomena de Blainville, 1824, *Dictionnaire des Sciences Naturelles*, Ed. 2, vol. 32, p. 302.

OPINION 1672

Muraena Linnaeus, 1758 and *Anguilla* Schrank, 1798 (Osteichthyes, Anguilliformes): placed on the Official List of Generic Names

Ruling

(1) The following names are hereby placed on the Official List of Generic Names in Zoology:

- (a) *Muraena* Linnaeus, 1758 (gender: feminine), type species by subsequent designation by Bory de Saint-Vincent (1827) *Muraena helena* Linnaeus, 1758;
- (b) *Anguilla* Schrank, 1798 (gender: feminine), type species by monotypy *Muraena anguilla* Linnaeus, 1758.

(2) The following names are hereby placed on the Official List of Specific Names in Zoology:

- (a) *helena* Linnaeus, 1758, as published in the binomen *Muraena helena* (specific name of the type species of *Muraena* Linnaeus, 1758);
- (b) *anguilla* Linnaeus, 1758, as published in the binomen *Muraena anguilla* (specific name of the type species of *Anguilla* Schrank, 1798).

History of Case 1173

An application for the confirmation of *Muraena helena* Linnaeus, 1758 as the type species of *Muraena* was received from Miss Ruth A. Cooper (*Secretariat, International Commission on Zoological Nomenclature*) and Mr Oliver A. Crimmen (*The Natural History Museum, London, U.K.*) on 21 September 1989. After correspondence the case was published in BZN 46: 259–261 (December 1989). Notice of the case was sent to appropriate journals.

The generic name *Muraena*, consistently used for moray eels, was placed on the Official List of Generic Names in Opinion 77 (January 1922) with the universally accepted type species *M. helena* Linnaeus, 1758. However, in 1958 *Muraena* was withdrawn from the List for further investigation: the earliest designation of a type species was believed to be that by Bleeker (1865) of *M. anguilla* Linnaeus, 1758. *M. anguilla* is the type species by monotypy of *Anguilla* Schrank, 1798, the common river eel, and strict adherence to the Règles [Code] would have resulted in the transfer of the name *Muraena* from the moray to the common eel and the loss of the name *Anguilla* as a junior objective synonym.

The application by Cooper & Crimmen (BZN 47: 259–261) sought to set aside Bleeker's (1865) designation of *anguilla* as the type of *Muraena* and accept that by Jordan & Gilbert (1882) of *helena*, thereby conserving both generic names, *Muraena* and *Anguilla*, in their accustomed usages.

A comment from Mr Alwyne Wheeler (*Epping Forest Conservation Centre, Loughton, Essex, U.K.*), published in BZN 47: 138 (June 1990), noted that the name *Anguilla* dated from Schrank (1798), and not Shaw (1803) as cited in the application. Comments from Dr F.C. Thompson (*United States Department of Agriculture, Washington D.C., U.S.A.*) and from one of the authors of the application (Ruth Cooper), published in BZN 47: 139, pointed out that Commission action was not required to conserve the name *Muraena* in its accustomed sense: the designation by

Bory de Saint-Vincent (1827) of *helena* as the type species predated that by Bleeker (1865) and *helena* is thus the valid type species of the genus.

The Commission was asked to agree to place both *Muraena* Linnaeus, 1758 and *Anguilla* Schrank, 1798 on the Official List, with *Muraena helena* and *M. anguilla*, both of Linnaeus, 1758, the respective type species.

Decision of the Commission

On 1 September 1991 the members of the Commission were invited to vote. At the close of the voting period on 1 December 1991 the votes were as follows:

Affirmative votes — 26: Bayer, Bock, Cocks, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Thompson, Trjapitzin, Uéno, Willink

Negative votes — none.

No vote was received from Cogger.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

Anguilla Schrank, 1798, *Fauna Boica*, vol. 1, part 2, p. 304.

anguilla, *Muraena*, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 245.

helena, *Muraena*, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 244.

Muraena Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 244.

The following is the reference for the designation of *Muraena helena* Linnaeus, 1758 as the type species of the nominal genus *Muraena* Linnaeus, 1758:

Bory de Saint-Vincent, J.B.G.M. 1827, in Audouin, [J.V.] et al. (Eds.), *Dictionnaire classique d'Histoire naturelle*, vol. 11, p. 305.

OPINION 1673

LIPARIDAE Gill, 1861 (Osteichthyes, Scorpaeniformes): spelling confirmed

Ruling

(1) It is hereby ruled that for the purposes of Article 29 of the Code the stem of the generic name *Liparis* Scopoli, 1777, is LIPAR-.

(2) The name *Liparis* Scopoli, 1777 (gender: feminine), type species by absolute tautonymy *Cyclopterus liparis* Linnaeus, 1766, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *liparis* Linnaeus, 1766, as published in the binomen *Cyclopterus liparis* (specific name of the type species of *Liparis* Scopoli, 1777) is hereby placed on the Official List of Specific Names in Zoology.

(4) The name LIPARIDAE Gill, 1861 (type genus *Liparis* Scopoli, 1777), spelling confirmed in (1) above, is hereby placed on the Official List of Family-Group Names in Zoology.

History of Case 2440

An application for the confirmation of the spelling of LIPARIDAE Gill, 1861 was received from Dr Kenneth D. Vogt (*Anchorage, Alaska, U.S.A.*) on 25 April 1983. After correspondence the case was published in BZN 45: 130–131 (June 1988). Notice of the case was sent to appropriate journals. A comment from Prof L.B. Holthuis (*Nationaal Natuurhistorisch Museum, Leiden, The Netherlands*) was published in BZN 45: 292 (December 1988), together with a comment in support from Mr Alwyne Wheeler (*The Natural History Museum, London, U.K.*). A comment in support from Prof E. Mayr (*Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts, U.S.A.*) was published in BZN 46: 45 (March 1989). A comment on the etymology of *Liparis* from Prof H.D. Cameron (*University of Michigan, Ann Arbor, Michigan, U.S.A.*) was published in BZN 47: 296–297 (December 1990). Comments from Drs B.A. Korotyaev & E.P. Nartshuk (*Zoological Institute, St Petersburg, Russia*) and Dr H. Silfverberg (*Zoological Museum, Helsinki, Finland*) were reported by Dr P.K. Tubbs (*Executive Secretary, ICZN*) in BZN 47: 297–298 (December 1990). Use of the plenary powers was not specifically requested in this case (BZN 45: 131) and Prof Cameron (BZN 47: 297) stated that the correct spelling of the family-group name was LIPARIDAE. The Commission was asked to confirm formally this spelling and to agree to place the name on the Official List.

Decision of the Commission

On 1 September 1991 the members of the Commission were invited to vote on the proposals published in BZN 45: 131. At the close of the voting period on 1 December 1991 the votes were as follows:

Affirmative votes — 25: Bayer, Bock, Cocks, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 1: Lehtinen.

No vote was received from Cogger.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

Liparis Scopoli, 1777, *J.A. Scopoli... Introductio ad Historiam naturalem, sistens genera Lapidum, Plantarum et Animalium...*, p. 453.

liparis, *Cyclopterus*, Linnaeus, 1766, *Systema Naturae*, Ed. 12, vol. 1(1) p. 414.

LIPARIDAE Gill, 1861, *Catalogue of the fishes of the eastern coast of North America, from Greenland to Georgia*, p. 47.

OPINION 1674

THRESKIORNITHIDAE Poche, 1904 (Aves, Ciconiiformes): given precedence over PLATALEIDAE Bonaparte, 1838 and EUDOCIMIDAE Bonaparte, 1854

Ruling

(1) Under the plenary powers THRESKIORNITHIDAE Poche, 1904 and other family-group names based on *Threskiornis* Gray, 1842 are hereby given precedence over PLATALEIDAE Bonaparte, 1838 and EUDOCIMIDAE Bonaparte, 1854 and other family-group names based on *Platalea* Linnaeus, 1758 or *Eudocimus* Wagler, 1832, or on any other nominal genus placed in the same family-group taxon as *Threskiornis*.

(2) The following names are hereby placed on the Official List of Generic Names in Zoology:

- (a) *Threskiornis* Gray, 1842 (gender: masculine), type species by original designation *Tantalus aethiopicus* Latham, 1790;
- (b) *Platalea* Linnaeus, 1758 (gender: feminine), type species by subsequent designation by Gray (1840) *Platalea leucorodia* Linnaeus, 1758;
- (c) *Eudocimus* Wagler, 1832 (gender: masculine), type species by subsequent designation by Reichenow (1877) *Scolopax rubra* Linnaeus, 1758.

(3) The following names are hereby placed on the Official List of Specific Names in Zoology:

- (a) *aethiopicus* Latham, 1790, as published in the binomen *Tantalus aethiopicus* (specific name of the type species of *Threskiornis* Gray, 1842);
- (b) *leucorodia* Linnaeus, 1758, as published in the binomen *Platalea leucorodia* (specific name of the type species of *Platalea* Linnaeus, 1758);
- (c) *rubra* Linnaeus, 1758, as published in the binomen *Scolopax rubra* (specific name of the type species of *Eudocimus* Wagler, 1832).

(4) The following names are hereby placed on the Official List of Family-Group Names in Zoology:

- (a) THRESKIORNITHIDAE Poche, 1904 (type genus *Threskiornis* Gray, 1842), with the endorsement that it and other family-group names based on *Threskiornis* are to be given precedence over those based on *Platalea* Linnaeus, 1758, on *Eudocimus* Wagler, 1832, or on any other nominal genus placed in the same family-group taxon as *Threskiornis*;
- (b) PLATALEIDAE Bonaparte, 1838 (type genus *Platalea* Linnaeus, 1758), with the endorsement that it and other family-group names based on *Platalea* are not to be given priority over those based on *Threskiornis* Gray, 1842;
- (c) EUDOCIMIDAE Bonaparte, 1854 (type genus *Eudocimus* Wagler, 1832), with the endorsement that it and other family-group names based on *Eudocimus* are not to be given priority over those based on *Threskiornis* Gray, 1842.

History of Case 2136

An application to place the widely used name THRESKIORNITHIDAE on the Official List of Family-Group Names in Zoology and to give it precedence over PLATALEINAE Bonaparte, 1838 and other competing family-group names was received from Prof

E. Mayr (*Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts, U.S.A.*), Dr K.C. Parkes (*Carnegie Museum of Natural History, Pittsburgh, U.S.A.*) and the late Dr E. Eisenmann on 31 July 1975. After long delays the case was published in BZN 41: 240–244 (November 1984). Notice of the case was sent to appropriate journals.

Comments in opposition from Dr Kenneth E. Campbell (*Natural History Museum, Los Angeles, California, U.S.A.*), from Dr Allan R. Phillips (*San Nicolás de los Garza, Nuevo León, Mexico*) and from Dr Storrs L. Olson (*National Museum of Natural History, Smithsonian Institution, Washington D.C., U.S.A.*) were published in BZN 43: 10–13 (April 1986).

Prof Walter J. Bock (Chairman of the Standing Committee on Nomenclature of the International Ornithological Congress (SCON)). *Columbia University, New York, N.Y., U.S.A.*) reported on the support for the application from SCON following a Congress meeting in 1986 (published in BZN 43: 324; December 1986). No further action was taken pending a proposed comprehensive application from SCON on bird family-group names.

Following an Ornithological Congress in December 1990 Prof Bock (in litt., April 1991) pointed out that the name THRESKIORNITHIDAE was first proposed by Poche (1904, p. 498), and not by Richmond (1917) as was stated in the original application. The name should therefore be cited with this date. Poche's authorship rendered the name senior to PLEGADIDAE Mathews, 1913 and no action was necessary with regard to the latter name.

In his letter Prof Bock mentioned three further family-group names, not previously cited in this case, based on genera included in the THRESKIORNITHIDAE auctt. These were 'Geronticeae' (type genus *Geronticus* Wagler, 1832) and 'Phimoseae' (type genus *Phimosus* Wagler, 1832), both appearing in a table by Bonaparte (1855, p. 725), and FALCINELLINAE Des Murs, 1860 (pp. 428, 537; type genus *Falcinellus* Gray, 1840 (p. 67), which is a junior synonym of *Plegadis* Kaup, 1829, and also a junior homonym). Although senior to THRESKIORNITHIDAE Poche, 1904, not one of these three names has been used as valid for many years, and there seemed no reason to delay further the present case (primarily concerned with THRESKIORNITHIDAE and PLATALEIDAE) for them and their type genera (and the type species of these) to be considered *de novo*.

The original proposals (BZN 41: 244) did not ask for the placing of any type genera or species on the Official Lists, although they were mentioned in the preceding text. In keeping with normal practice they were included in revised proposals on the voting paper, together with the revised date for THRESKIORNITHIDAE.

Decision of the Commission

On 1 September 1991 the members of the Commission were invited to vote on the revised proposals. At the close of the voting period on 1 December 1991 the votes were as follows:

Affirmative votes — 18: Bock, Cocks, Corliss, Hahn, Halvorsen, Kraus, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Trjapitzin, Uéno, Willink

Negative votes — 8: Bayer, Dupuis, Heppell, Holthuis, Kabata, Lehtinen, Macpherson and Thompson.

No vote was received from Cogger.

Holthuis commented: 'The strict use of priority here is the safest, simplest, least messy and most logical solution. *Platalea* and PLATALEIDAE are well-known names. Each time family names based on genera of this group published between 1838 and 1904 are found, the Commission has to act. I cannot accept the phrase 'on any other nominal genus...' in revised proposal (1)'. Kabata commented: 'The opposing comments of Campbell, Phillips and Storrs seemed to me quite compelling and I share the views of these three commentators'. Thompson commented: 'Given that the ornithological community is divided on this question, it is best to follow the Principle of Priority'.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

aethiopicus, *Tantalus*, Latham, 1790, *Index Ornithologicus, sive Systema Ornithologiae*..., vol. 2, p. 706.

EUDOCIMINAE Bonaparte, 1854, *Annales des Sciences Naturelles*, Zoologie, (4)1(1): 142.

Eudocimus Wagler, 1832, *Isis (von Oken)*, p. 1232.

leucorodia, *Platalea*, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 139.

Platalea Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 139.

PLATALEINAE Bonaparte, 1838, *A geographical and comparative list of the birds of Europe and North America*, p. 48.

rubra, *Scolopax*, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 145.

Threskiornis G.R. Gray, 1842, *Appendix to a list of the genera of birds*, p. 13.

THRESKIORNITHIDAE Poche, 1904, *Zoologischer Anzeiger*, 27: 498.

The following is the reference for the designation of *Platalea leucorodia* Linnaeus, 1758 as the type species of the nominal genus *Platalea* Linnaeus, 1758:

Gray, G.R. 1840. *A list of the genera of birds, with an indication of the typical species of each genus*, p. 67.

The following is the reference for the designation of *Scolopax rubra* Linnaeus, 1758 as the type species of the nominal genus *Eudocimus* Wagler, 1832:

Reichenow, A. 1877. *Journal für Ornithologie*, 25(2): 145.

Other references mentioned in the Opinion are:

Bonaparte, Prince C.-L. 1855. Tableaux synoptiques de l'ordre des Hérons. *Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences*, 40: 718-725.

Des Murs, O. 1860. *Traité générale d'ologie ornithologique au point de vue de la classification*. xix, 640 pp. Klincksieck, Paris.

INSTRUCTIONS TO AUTHORS

The following notes are primarily for those preparing applications to the Commission; other authors should comply with the relevant sections. Applications should be prepared in the format of recent parts of the Bulletin; the Commission's Secretariat reserves the right to return applications not so prepared.

Text. Typed in double spacing, this should consist of numbered paragraphs setting out the details of the case and leading to a final paragraph of formal proposals. Text references should give dates and page numbers in parentheses, e.g. 'Daudin (1800, p. 39) described ...'. The Abstract will be prepared by the Secretariat.

References. These should be given for all authors cited. The title of periodicals should be in full and be underlined; numbers of volumes, parts, etc. should be in arabic figures, separated by a colon from page numbers. Book titles should be underlined and followed by the number of pages, the publisher and place of publication.

Submission of Application. Two copies should be sent to: The Executive Secretary, the International Commission on Zoological Nomenclature, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. It would help to reduce the time that it takes to process the large number of applications received if the typescript could be accompanied by a disk with copy in ASCII text in IBM PC format. It would also be helpful if applications were accompanied by photocopies of relevant pages of the main references where this is possible.

Applicants would be well advised to discuss their cases with other workers in the same field before submitting applications, so that they are aware of any wider implications and the likely reactions of other zoologists.

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THE BULLETIN OF ZOOLOGICAL NOMENCLATURE

The *Bulletin* is published four times a year for the International Commission on Zoological Nomenclature by the International Trust for Zoological Nomenclature, a charity (no. 211944) registered in England. The annual subscription for 1992 is £75 or \$145, postage included. All manuscripts, letters and orders should be sent to:

The Executive Secretary,
International Commission on Zoological Nomenclature,
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BULLETIN OF ZOOLOGICAL NOMENCLATURE

Volume 49, part 2 (pp. 101–180)

25 June 1992

Notices

(a) *Invitation to comment.* The Commission is authorised to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after their publication, but this period is normally extended to enable comments to be submitted. Any zoologist who wishes to comment on any of the applications is invited to send his contribution to the Executive Secretary of the Commission as quickly as possible.

(b) *Invitation to contribute general articles.* At present the *Bulletin* comprises mainly applications concerning names of particular animals or groups of animals, resulting comments and the Commission's eventual rulings (Opinions).

Articles or notes of a more general nature are actively welcomed provided that they raise nomenclatural issues, although they may well deal with taxonomic matters for illustrative purposes. It should be the aim of such contributions to interest an audience wider than some small group of specialists.

(c) *Receipt of new applications.* The following new applications have been received since going to press for volume 49, part 1 (published on 26 March 1992). Under Article 80 of the Code, existing usage is to be maintained until the ruling of the Commission is published.

- (1) *Trachypora* Milne-Edwards & Haime, 1851 (Cnidaria, Tabulata): proposed designation of *T. elegantula* Billings, 1860 as the type species. (Case 2745). F. Tourneur.
- (2) Conservation of usage of generic names in the BUPRESTIDAE Leach, 1815 (Insecta, Coleoptera): proposed conservation of *Phaenops* Dejean, 1833 and *Palmar* Schaefer, 1949, together with the designation of *Buprestis acuminata* DeGeer, 1774 and *B. variolosa* Paykull, 1799 as the type species of *Melanophila* and *Poecilnота* Eschscholtz, 1829 respectively. (Case 2837). H. Mühle.
- (3) *Platynectes* Régimbart, 1878 and *Gueorguievtes* Vazirani, 1976 (Insecta, Coleoptera): proposed conservation. (Case 2841). A. Nilsson.
- (4) *Naucrates* Rafinesque, 1810 (Osteichthyes, Perciformes): proposed conservation. (Case 2842). J.E. Randall.
- (5) *Aradus caucasicus* Kolenati, 1857 (Insecta, Heteroptera): proposed designation of a neotype. (Case 2843). I.M. Kerzhner & E. Heiss.
- (6) *Oniscus asellus* Linnaeus, 1758 (Crustacea, Isopoda): proposed designation of a neotype. (Case 2844). D.T. Bilton.
- (7) *Taningia danae* Joubin, 1931 (Mollusca, Cephalopoda): proposed precedence over *Taningia persica* (Naef, 1923). (Case 2845). M. Vecchione & C.F.E. Roper.
- (8) *Xylotrogus brunneus* Stephens, 1830 (currently *Lyctus brunneus*) and *Cryptophagus advena* Waltl, 1834 (currently *Ahasverus advena*) (Insecta,

Coleoptera): proposed conservation of the specific names. (Case 2846). R.D. Pope.

(d) *Rulings of the Commission*. Each Opinion, Declaration or Direction published in the *Bulletin* constitutes an official ruling of the International Commission on Zoological Nomenclature, by virtue of the votes recorded, and comes into force on the day of publication of the *Bulletin*.

The European Association for Zoological Nomenclature

The European Association for Zoological Nomenclature has recently been established to facilitate liaison between European zoologists and the Commission, and to support the Commission's work. Members will receive a yearly Newsletter with information on the activities of the Association and Commission, and will be able to buy the *Code* and the *Official Lists and Indexes* at substantial discounts.

The Association's President is Dr V. Mahnert (Switzerland), the Vice-President Dr I.M. Kerzhner (Russia), the Secretary Dr E. Macpherson (Spain) and the Treasurer Dr M.A. Alonso-Zarazaga (Spain). Other members of the Inaugural Council are Dr H.M. André (Belgium), Dr J.-P. Hugot (France), Prof A. Minelli (Italy) and Dr C. Nielsen (Denmark). Membership of the Association is open to all European zoologists; further details can be obtained from Dr E. Macpherson, Instituto de Ciencias del Mar, Paseo Nacional, s/n 08039 Barcelona, Spain.

The International Code of Zoological Nomenclature

The Third Edition (published 1985) supersedes all earlier versions and incorporates many changes.

Copies can be ordered from I.T.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. or A.A.Z.N., c/o NHB Stop 163, National Museum of Natural History, Washington D.C. 20560, U.S.A. The cost is £19 or \$35, but members of the American Association for Zoological Nomenclature or the European Association for Zoological Nomenclature are offered the reduced price of £15 or \$29; payment should accompany orders.

Official Lists and Indexes of Names and Works in Zoology — Second Supplement to 1990

The Official Lists and Indexes of Names and Works in Zoology was published in 1987. This book gives details of all the names and works on which the Commission has ruled since it was set up in 1895, up to 1985; there are about 9,900 entries.

Copies can be ordered from I.T.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. or A.A.Z.N., c/o NHB Stop 163, National Museum of Natural History, Washington, D.C. 20560, U.S.A. The cost is £60 or \$110, but members of the American Association for Zoological Nomenclature or the European

Association for Zoological Nomenclature are offered the reduced price of £40 or \$75; payment should accompany orders.

In the five years 1986–1990, 946 names and five works were added to the Official Lists and Official Indexes. A supplement has been prepared giving these additional entries, together with some amendments and updating to entries in the 1987 volume. Copies can be obtained without charge from either of the above addresses.

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Case 2788***Mopsea* Lamouroux, 1816 (Cnidaria, Anthozoa): proposed designation of *Isis encrinula* Lamarck, 1815 as the type species**

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Abstract. The purpose of this application is to conserve the designation by Nutting (1910) of *Isis encrinula* Lamarck, 1815 as the type species of the coral genus *Mopsea* Lamouroux, 1816 (family ISIDIDAE). An earlier designation was of *Isis dichotoma* Linnaeus, 1758, an unidentifiable species of a different family. Species placed in *Mopsea* are found on the Australian continental shelf, in Antarctic waters, New Caledonia and the Moluccas but the group is paraphyletic.

1. The genus *Mopsea* was established by Lamouroux (1816, p. 465) in the family Isideae (now ISIDIDAE) with the originally included nominal species *Mopsea verticillata* Lamouroux (1816, p. 467) and *Mopsea dichotoma* (see paras. 3 and 4 below). *Mopsea verticillata* was a new name for *Isis encrinula* Lamarck, 1815 (p. 415) and was clearly based on specimens, as shown by Lamouroux's characteristic notation 'Museum d'Hist. Nat.' and Lamarck's 'Mus., no.' in their descriptive accounts. Lamouroux cited Lamarck's name *encrinula* in the synonymy of *verticillata* and defined the species almost verbatim in Lamarck's words (Lamarck wrote 'subbipinnatis' and Lamouroux wrote 'subpinnatis' which was probably nothing more than a transcription error). Lamouroux gave no justification for the new name and it is not certain whether *verticillata* and *encrinula* are objective or subjective synonyms.

2. Extensive investigations of relevant specimens at the Université de Caen and the Muséum National d'Histoire Naturelle in Paris have been conducted by Mme M.-J. d'Hondt who has made available to me fragments of three lots from the Lamarck Collection in Paris. There are indications that amongst this material is not only the specimen(s) apparently used by Lamarck for establishing *Isis encrinula* but possibly also that used by Lamouroux for *Mopsea verticillata*. All the material seems to belong to a single taxonomic species.

(i) The largest lot is labelled '*Isis encrinula*. Lk. *Mopsea verticillaris*. Lamx. De La N[ouv]elle Hollande par MM Péron and Lesueur 1809'. Mme d'Hondt has indicated that this has been treated by the Muséum as the type of *Isis encrinula*. The specimen has been recently illustrated and described by Bayer & Stefani (1987, pl. 18, fig. 1). I designate it as the lectotype of *Isis encrinula* Lamarck, 1815.

(ii) The second lot consists of three fragments and has also been illustrated by Bayer & Stefani (1987, pl. 18, fig. 2). It is accompanied by the following three labels: (a) 'g. *verticillaris*. var?' in ink in the handwriting of Lamarck; (b) 'Espèce nouvelle voisine des Gorgoniae mais à axe articulé' in pencil, thought to be possibly in the handwriting of

Lamouroux; (c) '*Isis, Gorgonia verticillaris*. Lk. var? *Prinnoa verticillaris*. Milne Edw. et J. Haime. Antilles' in an unknown hand. My research indicates that the species is endemic to Australian waters and would not be found in the Antilles, and Mme d'Hondt has suggested that 'Antilles' is a transcription error for 'Australasie'.

(iii) The last specimen consists of three very small fragments accompanied by labels '*Isis encrinula*' and '*Isis encrinule. Isis encrinula* nouv. holl.' in Lamarck's handwriting.

3. Lamouroux (1812, p. 188) had earlier published the nomen nudum *Melitea verticillaris*, and its taxonomic position was disputed by Lamarck (1815, p. 410) who stated that it should be placed in *Isis*, based on axial characteristics. When Lamouroux (1816, p. 465) established *Mopsea verticillata* he indicated that the same material was involved: 'Ces Polypiers, que j'avais mis d'abord parmi les Mélitées à cause du peu d'épaisseur de l'écorce, et que M. de Lamarck a replacé parmi les Isis, forment un genre bien distinct de l'ordre des Isidées'. Mme d'Hondt has suggested that it is quite possible that the material alluded to by Lamouroux is that referred to in (ii) above. She has pointed out that in the preliminary remarks (1812, p. 182) preceding his synopsis Lamouroux indicated that the work that followed was an improvement on Lamarck's earlier generic arrangement, and included the Australian material collected by Péron and Lesueur which was on display in the public galleries of the Muséum. If the labels and their glued positions on the display base are taken into account it could be inferred that Lamarck was the first to have seen that specimen, which he called '*g. verticillaris. var?*' and that the second label, commenting on the axis, was applied by Lamouroux who subsequently employed the nomen nudum *Melitea verticillaris* for this specimen, and in 1816 the name *Mopsea verticillata*. However, Mme d'Hondt, whose hypothesis fits the available evidence very well, admits that it is likely to remain forever conjectural whether this specimen was seen by Lamouroux. There is also doubt as to the status of the fragments in (i) above. When Lamarck (1815) disputed Lamouroux's taxonomic positioning of *Melitea verticillaris* he also established *Isis encrinula* in the same article, apparently not realising the similarities. It is possible he based *Isis encrinula* on the fragments in (iii) above, as the label on lot (i) mentions *Mopsea* which was not published until 1816. Bayer & Stefani (1987) had not seen lot (iii) above but considered the first two to be identical and even suggested that they may be portions of the same colony.

4. *Mopsea dichotoma* was originally established as *Isis dichotoma* by Linnaeus (1758, p. 799) on the basis of a figure and brief description of '*Hippuris coralloides carnea*, CAPENSIS, *geniculus limosis*' published by Petiver (1702, p. 7, pl. 3, fig. 10). *Isis dichotoma* was described more fully by Pallas (1766, p. 229) evidently on the basis of a specimen which might or might not have been the same species as Petiver's.

5. *Mopsea dichotoma* appears to have been included by Lamouroux (1816) solely on the strength of the previously published accounts he cited (Petiver, 1702; Seba, [1759]; Pallas, 1766; Esper, 1788; Gmelin, [1791]; Lamarck, 1815) since he did not mention any specimens. He did however make reference to Lamarck's account (1815, p. 415) of *Isis dichotoma* where Lamarck indicated material to hand with his notation 'Mus., no.'. Lamarck's brief descriptive remarks were mainly based on the work of Pallas (1766, p. 229) and Esper (1788, p. 43, pl. 5) and he admitted to only having seen a decorticated specimen: 'Je n'ai pas vu l'écorce; on la dit rouge, et chargée de papilles osculifères'. The small specimen from the Lamarck collection labelled '*Isis dichotoma*' in Lamarck's

handwriting, possibly seen by Lamouroux and kindly made available to me by Mme d'Hondt, is in fact a portion of an articulated *Adeona* skeleton which is a bryozoan and not a gorgonian. Wright & Studer's (1889, p. 42) statement that the 'original specimens (sic) of Lamarck's *Isis dichotoma*... agrees (sic) in all particulars' with material from Port Jackson collected on the *Challenger* expedition cannot be explained. I therefore conclude that neither Lamarck nor Lamouroux had an actual specimen attributable to *Isis dichotoma* Linnaeus. However, any specimens that may have been used by Pallas and later authors (including Lamarck) in describing *Isis dichotoma* are completely irrelevant to the identification of Linnaeus's species which was based solely on Petiver's (1702) account.

6. *Isis dichotoma* Linnaeus, 1758 was made the sole species of a new genus *Mopsella* by Gray ([1858], p. 284) which evidently belongs to the scleraxonian family MELITHAEIDAE rather than to the holaxonian family ISIDIDAE Kükenthal, 1924 (p. 65). The axial characters of the decorticated South African species illustrated by Petiver clearly indicate that it was a melithaeid. Several melithaeids, including '*Melitodes dichotoma* (Pallas)' reported by Hickson (1900, p. 80) and *Wrightella coccinea* Gray, 1870, have been reported from South Africa and the specific identity of *Isis dichotoma* will never be known with certainty but it is certainly not an isidid.

7. The first designation of a type species of *Mopsea* is that by Milne Edwards & Haime (1850, p. lxxxi) who selected *Mopsea dichotoma*, remarking only that the axis differed from *Isis* in originating from the horny nodes rather than from the calcareous segments. This indicates that they believed *Mopsea dichotoma* to be an isidid on the basis of published accounts and (like Lamouroux) had failed to take note of the swollen nature of the horny axial nodes shown in Petiver's illustration, which in fact places it with Lamouroux's (1816, p. 458) *Melitea* group subsequently included in the MELITHAEIDAE. Accepting *Isis dichotoma* as the type species is obviously unsatisfactory. Lamouroux, it seems, had no material on hand and based the species solely on published accounts that he incorrectly interpreted. Its recognition as the type species would make *Mopsea* a nomen dubium in the MELITHAEIDAE as the senior objective synonym of *Mopsella* Gray, [1858]. Species of ISIDIDAE now assigned to *Mopsea* would require a new generic name. The problem created by the designation of *Isis dichotoma* as the type species of *Mopsea* was recognised by Bayer & Stefani (1987, p. 57) but no remedial action was taken.

8. Nutting (1910, p. 17), unaware of the (1850) type designation by Milne Edwards & Haime, designated *Mopsea encrinula* (i.e. *Isis encrinula* Lamarck, 1815) as the type species of the genus. Nutting's invalid designation of *Isis encrinula* reflects consistent usage of the name *Mopsea*, and unquestionably represents Lamouroux's original concept of it. Lamouroux's definition of the genus establishes the colony form as pinnately branched ('à rameaux pinnés') as is the case with *Isis encrinula*.

9. The name *Mopsea encrinula* (Lamarck, 1815) has been used by all authors since Ehrenberg (1834, p. 355), occurring in at least 16 publications. A representative list of references, additional to those cited in this application, is held by the Commission Secretariat. Kükenthal's summary of the gorgonians (1924, p. 437) recognised 11 nominal species of *Mopsea*. Kükenthal overlooked the publication of Briggs (1915) containing a further two species, and six species have been added to the genus since then (Thomson & Rennet, 1931; Tixier-Durivault, 1970; Utinomi, 1975; Bayer & Stefani, 1987).

10. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to set aside all designations of type species for the nominal genus *Mopsea* Lamouroux, 1816 prior to that by Nutting (1910) of *Isis encrinula* Lamarck, 1815;
- (2) to place on the Official List of Generic Names in Zoology the name *Mopsea* Lamouroux, 1816 (gender: feminine), type species by subsequent designation by Nutting (1910) *Isis encrinula* Lamarck, 1815, as ruled in (1) above;
- (3) to place on the Official List of Specific Names in Zoology the name *encrinula* Lamarck, 1815, as published in the binomen *Isis encrinula* (specific name of the type species of *Mopsea* Lamouroux, 1850), and as defined by the lectotype designated in para. 2 of this application.

Acknowledgements

This submission could not have been compiled without the extensive research efforts of Mme Marie-José d'Hondt of the Muséum National d'Histoire Naturelle, Paris, and her willingness to loan me valuable material from the Lamarck Collection, for which I am extremely grateful. I thank Frederick Bayer for constructive criticism. This work has been improved by discussions with Hal Cogger, Sandy Bruce, Helen Larson, Lyle Vale, Ann Hoggett and especially Carden Wallace.

References

- Bayer, F.M. & Stefani, J. 1987. Isididae (Gorgonacea) de Nouvelle-Calédonie: nouvelle clé des genres de la famille. *Bulletin du Muséum National d'Histoire Naturelle*, (4)9(A,1): 47–106.
- Briggs, E.A. 1915. Report on the Alcyonarians obtained by the F.I.S. 'Endeavour' on the Eastern and Southern Coasts of Australia. Part I. *Biological Results of the Fishing Experiments carried on by the F.I.S. 'Endeavour', 1909–14*, 3(2): 59–94.
- Ehrenberg, C.G. 1834. Beiträge zur physiologischen Kenntnis der Corallenthiere im allgemeinen, und besonders des rothen Meeres, nebst einem Versuche zur physiologischen Systematik derselben. *Abhandlungen der Königlichen (Preussischen) Akademie der Wissenschaften zu Berlin*, 1832(1): 225–380.
- Esper, E.J.C. 1788. *Die Pflanzenthiere in Abbildungen nach der Natur mit Farben erleuchtet nebst Beschreibungen*, vol. 1. 96 pp. Raspischen Buchhandlung, Nürnberg.
- Gmelin, J.F. [1791]. *Caroli a Linné Systema Naturae*, Ed. 13, vol. 1, part 6 (Vermes). Pp. 3021–3910. Lipsiae.
- Gray, J.E. [1858]. Synopsis of the families and genera of axiferous zoophytes or barked corals. *Proceedings of the Zoological Society of London*, 1857: 278–294.
- Gray, J.E. 1870. *Catalogue of lithophytes or stony corals in the collection of the British Museum*. iv, 51 pp. British Museum, London.
- Hickson, S.J. 1900. The Alcyonaria and Hydrocorallinae of the Cape of Good Hope. *Marine Investigations in South Africa*, 1(5): 67–96.
- Kükenthal, W. 1924. Gorgonaria. *Das Tierreich*, 47: 1–478.
- Lamarck, J.B. de. 1815. Sur les polypiers corticifères. *Mémoires du Muséum d'Histoire Naturelle*, 1: 401–416.
- Lamouroux, J.V.F. 1812. Extrait d'un mémoire sur la classification des Polypiers coralligènes non entièrement pierreux. *Nouveaux Bulletin des Sciences, par la Société Philomatique de Paris*, 3(63): 181–188.
- Lamouroux, J.V.F. 1816. *Histoire des Polypiers coralligènes flexibles, vulgairement nommés Zoophytes*. lxxxiv, 560 pp. Poisson, Caen.
- Linnaeus, C. 1758. *Systema Naturae*, Ed. 10, vol. 1. 824 pp. Salvii, Holmiae.

- Milne Edwards, H. & Haime, J.** 1850. *A monograph of the British fossil corals*. Part 1 (Introduction; corals from the Tertiary and Cretaceous formations). lxxxv, 71 pp. Palaeontographical Society, London.
- Nutting, C.C.** 1910. The Gorgonacea of the Siboga Expedition. V. The Isidae. *Siboga-Expeditie. Monographs*, 13(b2): 1–24.
- Pallas, P.S.** 1766. *Elenchus zoophytorum sistens generum adumbrationes generaliores et specierum cognitarum succinctas descriptions cum selectis auctorum synonymis*. xvi, 177, 28, 451 pp. Hagae.
- Petiver, J.** 1702. *Gazophylacii naturae & artis decas prima....*, [Pages unnumbered, 50 pls.]. Bateman, London.
- Seba, A.** [1759]. *Locupletissimi rerum naturalium thesauri accurata descriptio, et iconibus artificiosissimus expressio, per universam physices historiam....*, vol. 3. [22], 212 pp., 116 pls. Janssonio-Waesbergios, Amstelaedami.
- Thomson, J.A. & Rennet, N.I.** 1931. Alcyonaria, Madreporaria and Antipatharia. *Scientific Reports. Australasian Antarctic Expedition 1911–1914*, (C, Zoology & Botany), 9(3): 1–46.
- Tixier-Durivault, A.** 1970. Les Octocoralliaires de Nouvelle-Calédonie. Pp. 171–350 in: *L'Expedition française sur les récifs coralliens de la Nouvelle-Calédonie*, vol. 4. 376 pp. Paris.
- Utinomi, H.** 1975. Octocorallia collected by trawling in western Australia. *Publications of the Seto Marine Biological Laboratory*, 22(5): 237–266.
- Wright, E.P. & Studer, Th.** 1889. Report on the Alcyonaria collected by H.M.S. *Challenger* during the years 1873–1876. *Report on the Scientific Results of the Voyage of H.M.S. Challenger during the years 1873–76. Zoology*, 31: 1–314.

Case 2801

***Potamolithus* Pilsbry, 1896 (Mollusca, Gastropoda): proposed confirmation of *P. rushii* Pilsbry, 1896 as the type species**

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Abstract. The purpose of this application is to conserve the nominal genus *Potamolithus* from Pilsbry (1896, December), with *P. rushii* Pilsbry, 1896 as the type species, in accordance with universal acceptance. The generic name is available from a paper by Pilsbry & Rush (1896, November) which appeared a month earlier, but *P. rushii* was there only a nomen nudum and so not eligible to be the type species. Species of *Potamolithus* (family HYDROBIIDAE, subfamily LITHOGLYPHINAE) typically inhabit freshwater streams in the Neotropical region and are of considerable biogeographical and palaeontological interest.

1. The generic name *Potamolithus* first appeared, without description, in a paper by Pilsbry & Rush (1896, November, p. 80). Most of the 16 nominal species and subspecies included in the genus (including *rushii*; see para. 2 below) were nomina nuda and only four had available names: *Lithoglyphus buschii* Frauenfeld, 1865 (p. 530, pl. 11), *Paludina lapidum* d'Orbigny, 1835 (p. 29) and *Lithoglyphus tricostratus* and *L. conicus*, both of Brot, 1867 (pp. 68 and 69, pl. 1, figs. 4 and 5 respectively). The authors noted (p. 78, footnote) that 'the... new forms will be described in *Proc. Acad. Nat. Sci. Phila.* and the next number of *Nautilus*, space being lacking in this number'. Inclusion of the four available specific names renders the name *Potamolithus* available by indication (Article 12b(5) of the Code), but to our knowledge none of these nominal species has ever been designated as the type.

2. Subsequently, Pilsbry alone (1896, December, pp. 86–89; see also Clench & Turner, 1962, pp. 131, 175 for the dates of publication) published a second paper, giving a formal definition of the genus *Potamolithus* (p. 86), and of all its constituent species in the form of a diagnostic key. Pilsbry designated the new species *Potamolithus rushii* Pilsbry, 1896 (p. 87) as the type. However, *rushii* was not among the available nominal species included in the November publication and this designation is therefore invalid (Articles 67g and 69a(i)).

3. Pilsbry (1911, p. 566) cited himself alone as the author of the generic name (from the November paper) and *rushii* as the type species. Other workers have adopted the name *Potamolithus* from the second (December) paper, crediting authorship to Pilsbry (1896), and have accepted *P. rushii* as the type species. The genus includes both Recent and fossil species and these workers include Formica Corsi (1900, p. 329), Parodiz (1955, p. 96; 1965a, p. 1; 1965b, p. 273; 1969, p. 111), Jaekel (1969, p. 814, pl. 3, fig. 65), Clench & Turner (1962, p. 122), Pons da Silva & Davis (1983, p. 131), Davis & Pons da Silva (1984, p. 75), Manceñido & Damborenea (1984, p. 439) and Morton (1987, p. 206).

4. To maintain *P. rushii* Pilsbry, 1896 as the universally accepted type species of *Potamolithus* and authorship of the generic name as Pilsbry (1896), we propose that the Commission should rule that the generic name is to be taken as first available from the second (December) paper, with *P. rushii* as the type. The holotype of *P. rushii*, specimen no. 69686 in the Academy of Natural Sciences of Philadelphia, came from Paysandú on the Uruguay River, Uruguay.

5. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to rule that the generic name *Potamolithus* is deemed to be first available from Pilsbry (1896, December);
- (2) to confirm that the type species of the nominal genus *Potamolithus* Pilsbry, 1896 is by original designation *Potamolithus rushii* Pilsbry, 1896;
- (3) to place on the Official List of Generic Names in Zoology the name *Potamolithus* Pilsbry, 1896 (gender: masculine), type species by original designation, as confirmed in (2) above, *Potamolithus rushii* Pilsbry, 1896;
- (4) to place on the Official List of Specific Names in Zoology the name *rushii* Pilsbry, 1896, as published in the binomen *Potamolithus rushii* (specific name of the type species of *Potamolithus* Pilsbry, 1896).

Acknowledgements

We gratefully acknowledge earlier correspondence by one of us (M.F.L.A.) with Mr R.V. Melville (former Secretary to the Commission) and editorial assistance from the present Secretariat. Drs G.M. Davis and M.A. Garback (*Academy of Natural Sciences of Philadelphia*) who supplied copies of Pilsbry's original specimen labels, and Dr M. Griffin (*La Plata*) who aided in obtaining relevant bibliography, have also been very helpful.

References

- Brot, A.L. 1867. Descriptions d'espèces nouvelles de coquilles terrestres et fluviatiles américaines. *Journal de Conchyliologie*, (3)7: 68–71.
- Clench, W.J. & Turner, R.D. 1962. New names introduced by H.A. Pilsbry in the Mollusca & Crustacea. *Academy of Natural Sciences of Philadelphia, Special Publication*, 4: 1–218.
- Davis, G.M. & Pons da Silva, M.C. 1984. *Potamolithus*: morphology, convergence, and relationships among hydrobioid snails. *Malacologia*, 25(1): 73–108.
- Formica Corsi, A. 1900. Moluscos de la República Oriental del Uruguay. *Anales del Museo Nacional de Montevideo*, 2(15): 291–368.
- Frauenfeld, G.R. 1865. Zoologische Miscellen V. *Verhandlungen der Zoologischen-Botanischen Gesellschaft in Wien*, 15(3): 525–536.
- Jaecel, S.G.A., Jr. 1969. Die Mollusken Südamerikas. *Monographiae Biologicae*, 19: 794–827.
- Manceñido, M.O. & Damborenea, S.E. 1984. Megafauna de invertebrados paleozoicos y mesozoicos. Pp. 413–465 in Ramos, V.A. (Ed.), *Geología y recursos naturales de la Provincia de Rio Negro*. Relatorio IX Congreso Geológico Argentino, Buenos Aires.
- Morton, L.S. 1987. Gastrópodos de las Formaciones San José y Chiquimil (Mioceno tardío), Catamarca y Tucumán, Argentina. *Ameghiniana*, 23(3–4): 203–211.
- Orbigny, A.D. d'. 1835. Synopsis terrestrium et fluviatilium molluscorum in suo per Americam meridionalem itinere, ab A. d'Orbigny collectorum. *Magasin de Zoologie, Classe 5* (Mollusques), 5(62): 23–44.
- Parodiz, J.J. 1955. La validez del nombre *Paludestrina* d'Orbigny, 1839 (Moll. Gastr.). *Neotropica*, 1(6): 95–96.

- Parodiz, J.J.** 1965a. The hydrobid snails of the genus *Potamolithus* (Mesogastropoda — Rissoacea). *Sterkiana*, **20**: 1–38.
- Parodiz, J.J.** 1965b. Relaciones y evidencias paleontológicas de *Potamolithus*. *Comunicaciones de la Sociedad Malacológica del Uruguay*, **1**(9): 273–278.
- Parodiz, J.J.** 1969. The Tertiary non-marine Mollusca of South America. *Annals of the Carnegie Museum*, **40**: 1–242.
- Pilsbry, H.A.** 1896. Notes on new species of Amnicolidae collected by Dr. Rush in Uruguay. *The Nautilus*, **10**(8): 86–89.
- Pilsbry, H.A.** 1911. Non-marine Mollusca of Patagonia. *Report of the Princeton University Expeditions to Patagonia 1896–1899*, *Zoology*, **3**(5): 513–633.
- Pilsbry, H.A. & Rush, W.H.** 1896. List, with notes, of land and fresh water shells collected by Dr. Wm. H. Rush in Uruguay and Argentina. *The Nautilus*, **10**(7): 76–81.
- Pons da Silva, M.C. & Davis, G.M.** 1983. D'Orbigny's type specimens of *Paludestrina* (Gastropoda: Prosobranchia) from southern South America. *Proceedings of the Academy of Natural Sciences of Philadelphia*, **135**: 128–146.

Case 2526

***Strombiformis albus* Da Costa, 1778 (currently *Melanella (Balcis) alba*; Mollusca, Gastropoda): proposed conservation of the specific name**

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Abstract. The purpose of this application is to conserve the specific name of the prosobranch mollusc *Strombiformis albus* Da Costa, 1778 which is threatened by the unused senior subjective synonym *Turbo laevis* Pennant, 1777. The name *albus*, a senior subjective synonym of *Balcis montagui* Leach in Gray, 1847, the nominal type species of *Balcis* Leach in Gray, 1847, is universally in use. The name *Balcis* relates to a group of species which is considered to be subgenerically distinct from *Melanella* Bowdich, 1822 (in the world-wide family EULIMIDAE Philippi, 1853, which includes more than 4000 species, all parasitic on echinoderms).

1. Pennant (1777, p. 130) described a gastropod species as *Turbo laevis*. His description was brief: 'T.[urbo] with eight smooth spires [whorls], nearly obsolete. Tab. lxxix'. Pennant's plate shows eight very roughly executed drawings but the figures are not distinguished by name, number or any other means. The figure which relates to this description cannot be identified with certainty although the top figure is smooth and may represent it. Da Costa (1778, p. 117) doubtfully included *laevis* in his new species *Strombiformis glaber* but neither Pennant's description nor supposed figure noted the brownish spiral bands characteristic of this species, which are very resistant to wear, remain visible in most fossil specimens and are mentioned by all later authors. Eighteenth and 19th century authors (see, for example, Jeffreys, 1867, pp. 167, 203) considered *laevis* to be a senior synonym of *Balcis alba* (Da Costa, 1778) (see para. 3 below), but the name has not been used as valid since it was published.

2. Pennant (1777, p. 130) described a second mollusc as *Turbo albus* in a similar, very brief manner: 'T.[urbo] with eight spires, striated transversely [spirally]; white. Tab. lxxix'. The bottom figure on Pennant's plate fits this description of *T. albus* but it is not possible to be sure of the identity of this species. Jeffreys (1867, p. 167) considered *albus* Pennant to be a junior synonym of *Turbonilla lactea* (Linnaeus, 1758) (family PYRAMIDELLIDAE) but this is improbable since the latter species has axial sculpture only, like all related pyramidellids.

3. Da Costa (1778, p. 116) proposed the name *albus* for a 'milk white' species in his genus *Strombiformis* and indicated that he was unsure whether it was the same as *Turbo albus* Pennant. Da Costa's description was brief but it leaves little doubt that he was referring to a taxon distinct from *T. albus* Pennant, 1777 (see also para. 6). Donovan (1804, pl. 177, text) was the first author to give a clear description and illustration of Da Costa's species, although he uncritically accepted that Pennant had been dealing with the same taxon. Almost all subsequent authors have ignored Pennant's name and

have adopted *albus* Da Costa (1778) as valid. The meaning of Pennant's name is unclear but it is desirable that it be suppressed to avoid confusion.

4. Pulteney (1799, p. 49), in a work approved as available by the Commission (Opinion 1233, December 1982), included a species *polita* in *Helix*, citing *Turbo laevis* Pennant in synonymy. Montagu (1803, p. 398) followed Pulteney, citing *Turbo politus* Gmelin (i.e. Linnaeus) and *T. laevis* Pennant as synonyms of *polita*. Both Pulteney and Montagu described the species and subsequently (Montagu, 1808, p. 141; Rackett in Pulteney, 1813, p. 55) *Strombiformis albus* Da Costa was listed as a synonym. Gmelin's species *politus* ([1791], p. 3612) is that of Linnaeus (1758, p. 767; see Gmelin, [1792], pp. 4058, 4112) but the descriptions of Pulteney and Montagu could not have been based on *politus* Linnaeus, from the Mediterranean, since the latter is not known from Britain. There has been confusion in the past over the usages of the name *politus* Linnaeus and *politus* sensu Montagu (see para. 6).

5. Gray (1847a (October), p. 271) published Leach's page-proof name *Balcis*. Two of the included nominal species, *testacea* and *arcuata*, are nomina nuda. The third, *montagui*, is available by indication (Article 12b(1) of the Code). Gray wrote '*Balcis montagui*. *Helix polita* Mont.', referring to Montagu's (1803) description of '*polita*'. Evidently Leach had realized that Montagu had not been dealing with *T. politus* Linnaeus. The nominal species *montagui* is thus the type of *Balcis* by monotypy, and the later designation by Gray (1847b (November), p. 160) of *Helix subulatus* Donovan, 1804 is invalid; *subulatus* was not a nominal species included in the genus in the October publication.

6. Hanley (1855, p. 354) reported the earlier presence of 'a wretched example' of *Turbo politus* in Linnaeus's material, which could not then be found (Dance, 1966, p. 22 doubted the existence of such a specimen), and noted the discrepancy in size between Linnaeus's species *politus* ('grani hordei [barley grain] magnitudine') and that called '*politus*' by Montagu (15-20 mm.). Jeffreys (1867, pp. 167, 203) and other authors of that time used *politus* Linnaeus to include *politus* sensu Montagu (= *montagui* Leach in Gray). Martel (1905, p. 328), however, pointed out that malacologists were confusing two species and considered that the name *Turbo politus* Linnaeus referred exclusively to a small Mediterranean species, while the much larger Atlantic species should be called *Eulima alba* (Da Costa). Dautzenberg (1927, p. 162) followed this view. Both Martel and Dautzenberg considered that Da Costa (1778) had been in error in referring, even doubtfully, under his name *Strombiformis albus* to Pennant's (1777) *Turbo albus*, which was not a eulimid but possibly a young turritellid. Dautzenberg thought that Da Costa had confused the figures on Pennant's plate; he also noted that *T. laevis* Pennant was an earlier synonym of *albus* Da Costa. Winckworth (1934, pp. 12-13) discussed the nomenclature of the British genera of EULIMIDAE and concluded that '*B.[alcis] montagui* = *B. alba* (Da Costa)' was the valid type species of *Balcis* Leach, but did not mention the earlier name *Turbo albus* Pennant. This notation for the type species was followed by Wenz (1940, p. 835).

7. The specific name *alba* Da Costa, 1778 is much in use (see, for example, the recent works of Cabioch, Grainger, Keegan & Könnicker (1978), Sabelli, Giannuzzi-Savelli & Bedulli (1990, pp. 34, 184) and Smith & Heppell (1991, p. 28)) and it is very desirable to maintain stability of its nomenclature. The species is placed either in *Balcis* Leach in Gray, 1847 or in *Melanella* Bowdich, 1822 (p. 27); I consider that *Balcis* should be regarded as a subgenus of *Melanella*. There are a few later subjective synonyms (*Eulima*

anglica Sowerby, 1834, *E. porcellana* and *E. subangulata*, both of Sowerby, 1866) but none has been used since the original description; introduction of any of these names would cause confusion. The species was figured by Fretter & Graham (1982, p. 415, fig. 298), Warén (1984, p. 32, figs. 49, 50) and Graham (1988, p. 526, fig. 224). I designated a specimen from Plymouth, U.K. (Winckworth collection) in the Natural History Museum, London as the neotype (specimen no. BM(NH) 1984126; see Warén, 1989, p. 222, pl. 26, figs. 3, 4). I also discussed the identity of *T. politus* Linnaeus, now placed in *Melanella* Bowdich, 1822, and designated a specimen from the Golf de Gabes, Tunisia in the Zoological Museum, Uppsala as the neotype of this species (see Warén, 1988, pp. 20, 21, fig. 13). I now propose that the specific names of *Turbo laevis* and *T. albus*, both of Pennant (1777), be suppressed.

8. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to suppress the following specific names for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:
 - (a) *laevis* Pennant, 1777, as published in the binomen *Turbo laevis*;
 - (b) *albus* Pennant, 1777, as published in the binomen *Turbo albus*;
- (2) to place on the Official List of Generic Names in Zoology the name *Balcis* Leach in Gray, 1847 (gender: feminine), type species by monotypy *Balcis montagui* Leach in Gray, 1847 (a junior subjective synonym of *Strombiformis albus* Da Costa, 1778);
- (3) to place on the Official List of Specific Names in Zoology the name *albus* Da Costa, 1778, as published in the binomen *Strombiformis albus* and as defined by the neotype designated by Warén (1989) (senior subjective synonym of the specific name of *Balcis montagui* Leach in Gray, 1847, the type species of *Balcis* Leach in Gray, 1847);
- (4) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the following names:
 - (a) *laevis* Pennant, 1777, as published in the binomen *Turbo laevis* and as suppressed in (1)(a) above;
 - (b) *albus* Pennant, 1777, as published in the binomen *Turbo albus* and as suppressed in (1)(b) above.

References

- Bowdich, T.E. 1822. *Elements of conchology including the fossil genera and the animals*, vol. 1 (Univalves). 79 pp., 19 pls. Paris & London.
- Cabioch, L., Grainger, J.N.R., Keegan, B.F. & Könnecker, G. 1978. *Balcis alba*, a 'temporary' ectoparasite on *Neopentadactyla mixta* Östergren. Pp. 237–240 in McLusky, D.S. & Berry, A.J. (Eds.), *Physiology and behaviour of marine organisms*. xv, 388 pp. Pergamon Press, Oxford.
- Da Costa, E.M. 1778. *Historia Naturalis testaceorum Britanniae or, the British conchology*... xii, 254, vii pp., 17 pls. Author, London.
- Dance, S.P. 1967. Report on the Linnaean shell collection. *Proceedings of the Linnean Society of London*, 178(1): 1–24.
- Dautzenberg, P. 1927. Mollusques provenant des campagnes scientifiques du Prince Albert^{1er} de Monaco dans l'ocean Atlantique et dans le Golfe de Gascogne. *Résultats des Campagnes Scientifiques accomplies par le Prince Albert¹*, 72: 1–400.

- Donovan, E.** 1804. *The natural history of British shells*, vol. 5. Pls. 145–180. Author & Rivington, London.
- Fretter, V. & Graham, A.** 1982. The prosobranch molluscs of Britain and Denmark. Part 7 ('Heterogastropoda'). *Journal of Molluscan Studies Supplement*, **11**: 363–434.
- Gmelin, J.F.** [1791], [1792]. *Caroli a Linné Systema Naturae*, Ed. 13, vol. 1. Part 6 (Vermes), pp. 3021–3910 ([1791]); part 7 (Index), pp. 3911–4120 ([1792]). Lugduni.
- Graham, A.** 1988. Molluscs: prosobranch and pyramidellid gastropods. *Synopses of the British Fauna*, new series, **2** (Ed.2): 1–662.
- Gray, J.E.** 1847a (October). Leach's classification of British Mollusca. *Annals and Magazine of Natural History*, **20**(133): 267–273.
- Gray, J.E.** 1847b (November). A list of the genera of recent Mollusca, their synonyma and types. *Proceedings of the Zoological Society of London*, **15**: 129–219.
- Hanley, S.** 1855. *Ipsa Linnaei conchylia. The shells of Linnaeus...* 556 pp., 5 pls. Williams & Norgate, London.
- Jeffreys, J.G.** 1867. *British conchology, or account of the Mollusca which now inhabit the British Isles and the surrounding seas*, vol. 4. 486 pp., 8 pls. Van Voorst, London.
- Linnaeus, C.** 1758. *Systema Naturae*, Ed. 10, vol. 1. 824 pp. Salvii, Holmiae.
- Martel, H.** 1905. Coquilles marine de Cancale. Iconographie et critique de quelques petites espèces. *Bulletin de la Société Scientifique et Médicale de l'Ouest*, **14**: 326–332.
- Montagu, G.** 1803. *Testacea Britannica or natural history of British shells...*, vol. 2. Pp. 293–606, 16 pls. Hollis, Romsey.
- Montagu, G.** 1808. *Supplement to Testacea Britannica with additional plates*. v, 183 pp., pls. 17–30. Woolmer, Exeter.
- Pennant, T.** 1777. *British Zoology*, Ed. 4, vol. 4 (Crustacea, Mollusca, Testacea). 154 pp., 93 pls. Octavo edition. White, London.
- Pulteney, R.** 1799. *Catalogues of the birds, shells, and some of the more rare plants of Dorsetshire...* 92 pp. Author, London.
- Rackett, T.** 1813. *Pulteney's Catalogues of the birds, shells, and some of the more rare plants of Dorsetshire... With additions; and a brief memoir of the author*. iv, 110 pp., 23 pls. Author, London.
- Sabelli, B., Giannuzzi-Savelli, R. & Bedulli, D.** 1990. *Annotated check-list of Mediterranean marine mollusks*. 348 pp. Libreria Naturalista Bolognese, Bologna.
- Smith, S.M. & Heppell, D.** 1991. Checklist of British marine Mollusca. *National Museums of Scotland Information Series*, **11**: 1–114.
- Warén, A.** 1984. A generic revision of the family Eulimidae (Gastropoda, Prosobranchia). *Journal of Molluscan Studies Supplement*, **13**: 1–96.
- Warén, A.** 1988. The identity of *Turbo politus* Linnaeus, 1758 (Prosobranchia, Eulimidae). *Bollettino Malacologico*, **24**: 17–24.
- Warén, A.** 1989. Designation of neotypes of '*Melanella alba* (Da Costa, 1778)' and '*Eulima glabra* (Da Costa, 1778)'. *Journal of Conchology*, **33**(4): 219–224.
- Wenz, W.** 1940. Gastropoda. Prosobranchia. In Schindewolf, O.H. (Ed.), *Handbuch der Paläozoologie*, vol. 6, Teil 4, Lieferung 6. Pp. 721–960. Borntraeger, Berlin.
- Winckworth, R.** 1934. Names of British marine Mollusca. 2. *Journal of Conchology*, **20**(1): 9–15.

Case 2789

***Amicytheridea* Bate, 1975 (Crustacea, Ostracoda): proposed designation of *Amicytheridea triangulata* Bate, 1975 as the type species**

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Abstract. The purpose of this application is the designation of *Amicytheridea triangulata* Bate, 1975, a species from Middle Callovian (Middle Jurassic) beds of Tanzania, as the type species of the ostracod genus *Amicytheridea* Bate, 1975 (PROGONOCYTHERIDEIDAE). Bate originally designated *Procytheridea ihopyensis* Grekoff, 1963 as the type species, but misidentified his material which belongs to an as yet unnamed taxon; it is proposed that the second originally included species, *A. triangulata*, be designated as the type.

1. Bate (1975, p. 190) established the genus *Amicytheridea* from Middle Callovian beds of Tanzania and included two nominal species in it: *Procytheridea ihopyensis* Grekoff, 1963 (p. 1747), which he designated as the type species, and the new species *Amicytheridea triangulata* Bate, 1975 (p. 192), for which the holotype was deposited in The Natural History Museum, London (specimen No. Io. 6114). *A. triangulata* was fully described and illustrated (pp. 192–193, pl. 7, figs. 14–16, text-figs. 11a–c). Comparison of Grekoff's pl. 6 (*P. ihopyensis*) with Bate's pl. 7 caused Neale (1982, p. 184) to realize that the (still not named) species considered to be *Procytheridea ihopyensis* by Bate is not conspecific with that described by Grekoff (1963) from the Bathonian/Callovian of the Majunga Basin, Madagascar. The holotype of *P. ihopyensis* is deposited at the Institut Français du Pétrole, Rueil-Malmaison, France (specimen no. H279).

2. Given that Bate's specimens from Tanzania are not conspecific with that of *Procytheridea ihopyensis* described by Grekoff (1963), Bate's species could be designated as the type species of *Amicytheridea* under a new name, or the second of the two originally included species (i.e. *triangulata*) could be designated as the type. We prefer the latter course. Except for a lesser number of anterior marginal pore canals, *triangulata* shows all the essential characteristics of the genus as described by Bate (1975).

3. Realizing that Bate had misidentified *Procytheridea ihopyensis*, Dépêche (in Dépêche, Le Nindre, Manivit & Vaslet, 1987, p. 230) revised *Amicytheridea* and (p. 231) designated *A. oblonga*, a newly described species from the Middle Callovian of central Saudi Arabia, as the type species. This designation is invalid both because the 'replacement' of Bate's original designation was done without reference to the Commission (Article 70b of the Code) and because *A. oblonga* was not an originally included species.

4. Besides Tanzania, species of *Amicytheridea* occur in the Upper Callovian of the Majunga Basin, Madagascar (Grekoff, 1963, p. 1749), the Callovian of Kachchh, India (our own observation), and central Saudi Arabia (Dépêche, in Dépêche, Le Nindre, Manivit & Vaslet, 1987, p. 230). The generic name has appeared in publications by Bate (1977a, 1977b), Bhatia (1984) and Dingle (1988).

5. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to set aside all previous designations of type species for the nominal genus *Amicytheridea* Bate, 1975, and to designate *Amicytheridea triangulata* Bate, 1975 as the type species;
- (2) to place on the Official List of Generic Names in Zoology the name *Amicytheridea* Bate, 1975 (gender: feminine), type species by designation in (1) above *Amicytheridea triangulata* Bate, 1975;
- (3) to place on the Official List of Specific Names in Zoology the name *triangulata* Bate, 1975, as published in the binomen *Amicytheridea triangulata* (specific name of the type species of *Amicytheridea* Bate, 1975).

References

- Bate, R.H. 1975. Ostracods from Callovian to Tithonian sediments of Tanzania, East Africa. *Bulletin of the British Museum (Natural History)*, Geology, **26**(5): 161–223.
- Bate, R.H. 1977a. Upper Jurassic Ostracoda from Tanzania, East Africa. Actes du sixième Colloque Africain de Micropaléontologie — Tunis 1974. *Annales des Mines et de la Géologie, Tunis*, **28**: 163–183.
- Bate, R.H. 1977b. Jurassic Ostracoda of the Atlantic Basin. *Developments in Palaeontology and Stratigraphy*, **6**: 231–244.
- Bhatia, S.B. 1984. Ostracode faunas of the Indian Subcontinent — their paleozoogeographic and paleoecologic implications. *Journal of the Palaeontological Society of India*, **20**: 1–8.
- Dépêche, F., Le Nindre, Y., Manivit, J. & Vaslet, D. 1987. Les ostracodes du Jurassique d'Arabie Saoudite central: systématique, répartition stratigraphique et paléogéographique. *Geobios* (mémoire spécial), **9**: 221–275.
- Dingle, R.V. 1988. Marine ostracod distributions during the early breakup of Southern Gondwanaland. *Developments in Palaeontology and Stratigraphy*, **11**: 841–854.
- Grekoﬀ, N. 1963. Contribution à l'étude des ostracodes du Mésozoïque moyen (Bathonien-Valanginien) du Bassin de Majunga, Madagascar. *Revue de l'Institut Français du Pétrole et Annales des Combustibles Liquides*, **18**(12): 1709–1762.
- Neale, J.W. 1982. Aspects of the subfamily Schulerideinae. Pp. 178–192 in Bate, R.H., Robinson, E. & Sheppard, L.M. (Eds.), *Fossil and Recent Ostracods*. 492 pp. Ellis Horwood, Chichester, England.

Case 2794***Gerris paludum* Fabricius, 1794 (currently *Aquarius paludum*; Insecta, Heteroptera): proposed conservation of the specific name**

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Abstract. The purpose of this application is to conserve the specific name of the water-strider *Gerris paludum* Fabricius, 1794 by the suppression of the virtually unused senior subjective synonym *alatus* Retzius, 1783, originally published for a 'variety' of *Aquarius najas* (De Geer, 1773).

1. When describing *Cimex najas*, De Geer (1773, p. 311) distinguished two forms, both of which he illustrated: one was wingless (tab. 16, figs. 8, 9), the other winged and with two spines posteriorly (tab. 16, figs. 7, 13).

2. Retzius (1783, p. 89), in his interpretation of insect species described by De Geer (1773), applied the name var. *α apterus* to the wingless form of *Cimex najas* and var. *β alatus* to the winged form with two posterior spines.

3. Reuter (1988, p. 716) listed *Cimex najas* var. *α apterus* Retzius, 1783 as *Gerris najas* (De Geer) and var. *β alatus* Retzius, 1783 as a synonym of *G. paludum* Fabricius, 1794 (p. 188). In De Geer's collection in the Natural History Museum, Stockholm, there are two wingless females of what is currently called *Aquarius najas* (De Geer) and one winged female of what is currently *A. paludum* (Fabricius). The latter is probably the specimen De Geer (1773) described as the winged and spinous form of his *Cimex najas* and which Retzius (1783) named var. *alatus*.

4. If Retzius's names are treated as names of subspecific rank, *alatus* Retzius, 1783 has priority over *paludum* Fabricius, 1794. However, Retzius's names had never been used to denote species-group taxa until Kanyukova (1982, p. 74) implied that *Gerris paludum* Fabricius, 1794 could be replaced by *G. alatus* Retzius, 1783: she referred to the rule (Article 45e of the 1964 Code) which stated that 'variety' names given before 1961 were to be interpreted as subspecific. On the other hand, the Fabrician name has been adopted in the literature (taxonomic as well as ecological) since the early 19th century (a list of 10 representative works is held by the Commission Secretariat).

5. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to suppress the name *alatus* Retzius, 1783, as published in the trinomen *Cimex najas* var. *alatus*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) to place on the Official List of Specific Names in Zoology the name *paludum* Fabricius, 1794, as published in the binomen *Gerris paludum* and as interpreted by the lectotype designated by Andersen (1990, p. 59);

- (3) to place on the Official Index of Rejected and Invalid Names in Zoology the name *alatus* Retzius, 1783, as published in the trinomen *Cimex najas* var. *alatus* and as suppressed in (1) above.

References

- Andersen, N.M. 1990. Phylogeny and taxonomy of water striders, genus *Aquarius* Schellenberg (Insecta, Hemiptera, Gerridae), with a new species from Australia. *Steenstrupia*, **16**: 37–81.
- De Geer, C. 1773. *Mémoires pour servir à l'histoire des Insectes*, vol. 3. 696 pp., 44 pls. Hesselberg, Stockholm.
- Fabricius, J.C. 1794. *Entomologia systematica emendata et aucta*, vol. 4. 472 pp. Proft, Hafniae.
- Kanyukova, E.V. 1982. Water-striders (Heteroptera, Gerridae) of the fauna of the U.S.S.R. *Trudy Zoologicheskogo Instituta, Leningrad*, **105**: 62–93. [In Russian.]
- Retzius, A.I. 1783. *Caroli De Geer Genera et Species Insectorum*. 220 pp. Leipzig.
- Reuter, O.M. 1888. Revisio synonymica Heteropterorum Palaearcticorum quae descripserunt auctores vetustiores (Linnaeus 1758 — Latreille 1806). *Acta Societas Scientiarum Fenniae*, **15**: 441–812.

Case 2772***Chrysobothris* Eschscholtz, 1829 and *Dicerca* Eschscholtz, 1829 (Insecta, Coleoptera): proposed conservation as the correct original spellings**

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Abstract. The purpose of this application is the conservation of the buprestid generic names *Chrysobothris* and *Dicerca* Eschscholtz, 1829. The names originally appeared as *Chrysobotris* and *Dicerea*, but those spellings have not been used.

1. The spellings *Chrysobotris* and *Dicerea* were published by Eschscholtz (1829, p. 9). Since the names appear only once, it is impossible to verify from the original paper that misspellings were involved. However, Dr. M.G. Volkovitsh (in litt.) reports that Dr. G. Ljubarskij has examined the original collection of Eschscholtz in the Zoological Museum of Moscow and the spellings *Dicerca* and *Chrysobothris* were used on the labels.

2. The spelling *Chrysobothris* (meaning 'gold pits') has been used by all authors from the time of Solier (1833, p. 310) to the present, except Westwood ([1838], p. 24) who used the original spelling *Chrysobotris*.

3. In the case of *Dicerca*, this spelling has been used by all authors from Faldermann (1835, p. 143), Spinola (1837, p. 102) and Mannerheim (1837, p. 53) to the present, except Westwood ([1838], p. 24) who used the spelling *Diceraea*; the Commission Secretariat has a list of 31 references. Leraut (1983, p. 6) drew attention to Eschscholtz's 'lapsus calami' in recording the genus name *Dicerea*, a name that makes no sense (the Greek roots *dis* = two and *cercos* = tail, by alluding to the elytral prolongations, make the correct spelling *Dicerca*). He pointed out that although most authors had used *Dicerca* 'Lacordaire, 1835' this is an unjustified emendation of *Dicerea* Eschscholtz and only the earlier name should be used, in accordance with the Code. He also suggested that the corresponding tribe should be DICEREINI and not DICERCINI as used at present.

4. Westwood ([1838], p. 24) designated *Buprestis chrysostigma* Linnaeus, 1758 (p. 409) as the type species of *Chrysobothris* (spelt *Chrysobotris*) Eschscholtz, 1829, and *Buprestis aenea* Linnaeus, 1761 (p. 213) as the type species of *Dicerca* (spelt *Diceraea*) Eschscholtz, 1829. The type species designations in Westwood's *Synopsis of the genera of British insects* were accepted as valid in Opinion 71 (January 1922). The dates of publication of the work were set out in Direction 63 (June 1957).

5. *Chrysobothris* and *Dicerca* are the type genera of CHRYSOBOTHRINI Gory & Laporte, [1839] and DICERCINI ('Dicercites') Kerremans, 1893 (p. 107).

6. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to rule that the correct original spellings of the generic names *Chrysobotris* Eschscholtz, 1829 and *Dicerea* Eschscholtz, 1829 are *Chrysobothris* and *Dicerca* respectively;
- (2) to place on the Official List of Generic Names in Zoology the following names:
 - (a) *Chrysobothris* Eschscholtz, 1829 (gender: feminine), type species by subsequent designation by Westwood ([1838]) *Buprestis chrysostigma* Linnaeus, 1758;
 - (b) *Dicerca* Eschscholtz, 1829 (gender: feminine), type species by subsequent designation by Westwood ([1838]) *Buprestis aenea* Linnaeus, 1761;
- (3) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *chrysostigma* Linnaeus, 1758, as published in the binomen *Buprestis chrysostigma* (specific name of the type species of *Chrysobothris* Eschscholtz, 1829);
 - (b) *aenea* Linnaeus, 1761, as published in the binomen *Buprestis aenea* (specific name of the type species of *Dicerca* Eschscholtz, 1829);
- (4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the following names:
 - (a) *Chrysobotris* Eschscholtz, 1829 (ruled in (1) above to be an incorrect original spelling of *Chrysobothris* Eschscholtz, 1829);
 - (b) *Dicerea* Eschscholtz, 1829 (ruled in (1) above to be an incorrect original spelling of *Dicerca* Eschscholtz, 1829).

References

- Eschscholtz, J.F. 1829. *Atlas, enthaltend Abbildungen und Beschreibungen neuer Theirarten, während des Flottcapitains von Kotzebue zweiter Reise um die Welt, auf der Russisch-Kaiserlichen Kriegsschiff Predprietaie in den Jahren 1823–1826*, vol. 1. 17 pp. Berlin.
- Faldermann, F. 1835. *Additamenta entomologica ad faunam Rossicam. Nouveaux Mémoires de la Société Impériale des Naturalistes de Moscou*, 4(2): 137–159.
- Gory, H.L. & Laporte, F.L. de (Comte de Castelnau). [1839]. *Chrysobothridae*. Chrysobothridae. 77 pp. In: *Histoire naturelle et iconographie des insectes coléoptères*. . . . , vol. 2. Baillière, Paris.
- Kerremans, C. 1893. *Essai de groupement des buprestides*. *Annales de la Société Entomologique de Belgique*, 37: 94–122.
- Leraut, P. 1983. *Mise à jour de la nomenclature de quelques genres de Buprestides de France*. *Entomologica Gallica*, 1(1): 5–8.
- Linnaeus, C. 1758. *Systema Naturae*, Ed. 10, vol. 1. 824 pp. Salvii, Holmiae.
- Linnaeus, C. 1761. *Fauna Svecica*...., Ed. 2. 578 pp. Salvii, Stockholmiae.
- Mannerheim, C.G. von. 1837. *Enumeration des buprestides, et description de quelques nouvelles espèces de cette tribu de la famille des sternoxes, de la collection de M. le Comte Mannerheim*. *Bulletin de la Société Impériale des Naturalistes de Moscou*, 10(8): 3–126.
- Solier, A.J.J. 1833. *Essai sur les buprestides*. *Annales de la Société Entomologique de France*, 2: 261–316.
- Spinola, M. 1837. *Lettre adressée à la Société Entomologique de France, sur un group de buprestides*. *Annales de la Société Entomologique de France*, 6: 101–122.
- Westwood, J.O. [1838]. *Synopsis of the genera of British insects*, pp. 17–32. Published with *An introduction to the modern classification of insects*...., vol. 1, part 3. Pp. 113–160. Longman, Orme, Brown, Green & Longmans, London.

Case 2786

TACHINIDAE Fleming, 1821 (Insecta, Coleoptera) and TACHINIDAE Robineau-Desvoidy, 1830 (Insecta, Diptera): proposed removal of homonymy, and TACHYPORIDAE MacLeay, 1825 (Insecta, Coleoptera): proposed precedence over TACHINUSIDAE Fleming, 1821

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Abstract. The name TACHINIDAE Robineau-Desvoidy, 1830 is in universal use for a very large family of Diptera, but is a junior homonym of the staphylinid beetle family-group name TACHINIDAE Fleming, 1821 (based on *Tachinus* Gravenhorst, 1802). Fleming's name is a senior synonym of TACHYPORINAE MacLeay, 1825 but is not in current use at any rank. It is proposed that the entire name of *Tachinus* be taken as the stem to remove homonymy with TACHINIDAE Robineau-Desvoidy, and that the usage of TACHYPORINAE MacLeay be conserved.

1. The beetle name TACHINIDAE, based on *Tachinus* Gravenhorst, 1802 (p. 134), was first used by Fleming (1821, p. 49) for a group also including *Tachyporus* Gravenhorst, 1802 (p. 124). His article is usually cited as 'Leach, 1817' but it was actually written by Fleming (article signed Q.Q., meaning J. Fleming according to the list of *Supplement* contributors in vol. 1, p. xxxviii) and was published in July 1821 (according to the list of publication dates given in vol. 6, part 2).

2. Family-group names based on *Tachinus* were used by several authors during the 19th century for a group also including *Tachyporus*. Almost all of these authors attributed the family-group name to Mannerheim (1830, p. 11). The catalogues of Agassiz (1846a, pp. 157–158; 1846c, p. 360) and Handlirsch (1925, p. 573) listed uses including that by 'Leach, 1817', i.e. Fleming (1821). Agassiz (1846c, p. 360) gave the emendation TACHINOIDAE with each name.

3. MacLeay (1825, p. 49) first proposed the name TACHYPORIDAE, implicitly based on *Tachyporus*. Numerous uses of names based on this genus (for taxa including *Tachinus* as well) followed. Apparently because most authors regarded Mannerheim (1830) as the author of TACHINIDAE (under which interpretation that name is a junior synonym of TACHYPORIDAE MacLeay, 1825), family-group names based on *Tachyporus* have been in virtually universal use since 1840 for taxa including *Tachinus* and *Tachyporus* (and additional genera). A list of more than 50 references showing this usage (selected from a much larger number) is held by the Commission Secretariat.

4. TACHYPORINAE MacLeay, 1825 is the next oldest name after Fleming's 1821 name in the current concept of the staphylinid subfamily, which includes over 30 genera and 1300 species around the world. The widespread and consistent use of this name for the past century and a half argues for giving it precedence over a name based on *Tachinus*.

5. In recent decades, family-group names based on *Tachinus* have been used by Coiffait (1954, p. 48), Coiffait & Sáiz (1968, p. 413) and Outerelo & Gamarra (1985, p. 116). These names were used for groups explicitly subordinate to TACHYPORINAE and excluding *Tachyporus*; no usage earlier than Coiffait (1954) was discussed. Such a group is not presently in general use (e.g. not by Coiffait, 1982), and there are no existing family-group names based on any genus placed with *Tachinus* in a taxon excluding *Tachyporus*.

6. In Diptera, TACHINIDAE dates from Robineau-Desvoidy (1830, p. 185), who proposed 'Tachinariae' based on *Tachina* Meigen, 1803 (p. 280) as a stirps (section) of his tribe Entomobiae, family Calypteratae. This name was cited by Agassiz (1846b, p. 38; 1846c, p. 360), in the second instance as the emendation TACHINOIDAE without comment on the homonymy with the name in Coleoptera.

7. The name TACHINIDAE was used universally for this dipterous family from 1830–1909, in the early years at various ranks and with a variety of endings. Hendel's (1908) resurrection of the long-buried names of Meigen (1800) brought up the name *Larvaevora* Meigen (1800, p. 38) as a senior synonym of *Tachina*, resulting in the family name LARVAEVIDAE. This change was widely resisted, with resulting divergence of usage beginning in 1910, but with usage of *Tachina* and TACHINIDAE predominating. The literature was reviewed by Sabrosky (1952; BZN 6: 131–141), who presented (1954; BZN 9: 225–240) the results of a world-wide questionnaire concerning usage of Meigen (1800) versus Meigen (1803) names. The work by Meigen (1800) was suppressed by the Commission (1963) in Opinion 678, and dipterists rapidly put the long-festering dispute behind them. Since then (or even before, in anticipation of the ruling) usage of TACHINIDAE Robineau-Desvoidy, 1830 has been virtually unanimous.

8. The TACHINIDAE are a large, important and varied family, perhaps second in size to the TIPULIDAE among the families of Diptera, with an estimated 8200 species world-wide. Many species are of economic importance as parasites of insect pests. The classification of the family is difficult and delimitation of genera is a matter of much difference of opinion. For example, Sabrosky & Arnaud (1965) listed 414 genera in America north of Mexico, but Wood (1987) recognized fewer than 300 genera in the same area.

9. Universal modern usage of TACHINIDAE in Diptera can be demonstrated by ten current regional catalogues and manuals: Sabrosky & Arnaud (1965), Colless & McAlpine (1970), Zimin, Zinov'eva & Shtakel'berg (1970 (and 1988)), Guimaraes (1971), Crosskey (1977, 1980), Hardy (1981), Herting (1984), Wood (1987) and Cantrell & Crosskey (1989). A list of 67 further references using the name is held by the Commission Secretariat.

10. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers:

(a) to rule that for the purposes of Article 29 the stem of the generic name *Tachinus* Gravenhorst, 1802 is TACHINUS-;

(b) to rule that family-group names based on *Tachyporus* Gravenhorst, 1802 are to be given precedence over those based on *Tachinus* Gravenhorst, 1802;

- (2) to place on the Official List of Generic Names in Zoology the following names:
 - (a) *Tachina* Meigen, 1803 (gender: feminine), type species by subsequent designation by Brauer (1893, p. 489) *Musca grossa* Linnaeus, 1758 (p. 596);
 - (b) *Tachinus* Gravenhorst, 1802 (gender: masculine), type species by subsequent designation by Latreille (1810, p. 427) *Staphylinus rufipes* Linnaeus, 1758 (p. 423);
 - (c) *Tachyporus* Gravenhorst, 1802 (gender: masculine), type species by subsequent designation by Latreille (1810, p. 427) *Staphylinus chrysomelinus* Linnaeus, 1758 (p. 423);
- (3) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *grossa* Linnaeus, 1758, as published in the binomen *Musca grossa* (specific name of the type species of *Tachina* Meigen, 1803);
 - (b) *rufipes* Linnaeus, 1758, as published in the binomen *Staphylinus rufipes* (specific name of the type species of *Tachinus* Gravenhorst, 1802);
 - (c) *chrysomelinus* Linnaeus, 1758, as published in the binomen *Staphylinus chrysomelinus* (specific name of the type species of *Tachyporus* Gravenhorst, 1802);
- (4) to place on the Official List of Family-Group Names in Zoology the following names:
 - (a) TACHINIDAE Robineau-Desvoidy, 1830, type genus *Tachina* Meigen, 1803 (Insecta, Diptera);
 - (b) TACHINUSIDAE Fleming, 1821, type genus *Tachinus* Gravenhorst, 1802 (spelling emended in (1)(a) above) (Insecta, Coleoptera), with the endorsement that it and other family-group names based on *Tachinus* are not to be given priority over those based on *Tachyporus* Gravenhorst, 1802;
 - (c) TACHYPORIDAE MacLeay, 1825, type genus *Tachyporus* Gravenhorst, 1802 (Insecta, Coleoptera), with the endorsement that it and other family-group names based on *Tachyporus* are to be given precedence over those based on *Tachinus* Gravenhorst, 1802;
- (5) to place on the Official Index of Rejected and Invalid Family-Group Names in Zoology the name TACHINIDAE Fleming, 1821 (spelling emended in (1)(a) above to TACHINUSIDAE).

Acknowledgements

This application arose from work by A.F.N. and M.K.T. on a manuscript concerning family-group names in Staphyliniformia (Coleoptera) and independent work by C.W.S. on family-group names in Diptera. We thank J.H. Frank for establishing contact between us as a result of reviewing the Coleoptera manuscript. A.F.N. and M.K.T. also thank R.B. Madge for calling their attention to the correct authorship of 'Leach 1817' names.

References

- Agassiz, J.L.R. 1846a. *Nomenclator zoologicus, continens nomina systematica generum Animalium, tam viventium quam fossilium, Coleoptera*. xi, 170 pp. Jent et Gassmann, Soloduri.
- Agassiz, J.L.R. 1846b. *Nomenclator zoologicus, continens nomina systematica generum Animalium, tam viventium quam fossilium, Diptera*. vi, 42 pp. Jent et Gassmann, Soloduri.

- Agassiz, J.L.R. 1846c. *Nomenclatoris zoologici index universalis*..... viii, 393 pp. Jent et Gassmann, Soloduri.
- Brauer, F. 1893. Vorarbeiten zu einer Monographie der *Muscaria schizometopa* (exklusive Anthomyidae). *Verhandlungen der kaiserlich-königlichen zoologisch-botanischen Gesellschaft in Wien*, 43: 447–525.
- Cantrell, B.K. & Crosskey R.W. 1989. Family Tachinidae. Pp. 733–784 in Evenhuis, N.L. (Ed.), *Catalog of the Diptera of the Australasian and Oceanian Regions*. 1155 pp. Bishop Museum Press, Honolulu, and Brill, Leiden.
- Coiffait, H. 1954. Les *Tachinus* de France, position du genre et description d'une espèce nouvelle (Col. Staphylinidae). *Annales de la Société Entomologique de France*, (6)123: 43–60.
- Coiffait, H. 1982. Contribution à la connaissance des Staphylinides de l'Himalaya (Népal, Ladakh, Cachemire) (Insecta: Coleoptera: Staphylinidae). *Senckenbergiana Biologica*, 62: 21–179.
- Coiffait, H. & Sáiz, F. 1968. Les Staphylinidae (sensu lato) du Chili. Pp. 339–468 in Delamare Deboutteville, C. & Rapoport, E. (Eds.), *Biologie de l'Amérique australe*, vol. 4. Documents biogéographiques et écologiques. 472 pp. Centre National de la Recherche Scientifique, Paris.
- Colless, D.H. & McAlpine, D.K. 1970. Diptera. Pp. 656–740 in: *The insects of Australia. A textbook for students and research workers*. 1029 pp. Division of Entomology, CSIRO, Melbourne University Press, Carlton.
- Crosskey, R.W. 1977. Family Tachinidae. Pp. 586–697 in Delfinado, M.D. & Hardy, D.E. (Eds.), *A catalog of the Diptera of the Oriental Region*, vol. 3. 854 pp. University Press of Hawaii, Honolulu.
- Crosskey, R.W. 1980. Family Tachinidae. Pp. 822–882 in Crosskey, R.W. (Ed.), *Catalogue of the Diptera of the Afrotropical Region*. 1437 pp. British Museum (Natural History), London.
- Fleming, J. 1821. Insecta. Pp. 41–56, pl. 85 in: *Supplement to the fourth, fifth and sixth editions of the Encyclopaedia Britannica*, vol. 5. 584 pp. Constable, Edinburgh.
- Gravenhorst, J.L.C. 1802. *Coleoptera microptera Brunsvicensia*.... lxvi, 206 pp. Reichard, Brunsvigae.
- Guimaraes, J.H. 1971. *A catalogue of the Diptera of the Americas south of the United States*. 104. Family Tachinidae (Larvaevoridae). 333 pp. Museu de Zoologia, Universidade de São Paulo, São Paulo.
- Handlirsch, A. 1925. Systematische Übersicht. Pp. 377–1140 in Schröder, C. (Ed.), *Handbuch der Entomologie*, vol. 3. Geschichte, Literatur, Technik, Paläontologie, Phylogenie, Systematik. viii, 1201 pp. Fischer, Jena.
- Hardy, D.E. 1981. Diptera Cyclorrhapha IV. In Zimmerman, E. C. (Ed.), *Insects of Hawaii*, vol. 14. vii, 491 pp. University of Hawaii Press, Honolulu.
- Hendel, F. 1908. Nouvelle classification des mouches à deux ailes (Diptera L.). D'après un plan tout nouveau par J. G. Meigen, Paris an VIII (1800 v. s.). *Verhandlungen der kaiserlich-königlichen zoologisch-botanischen Gesellschaft in Wien*, 58: 43–69.
- Herting, B. 1984. Catalogue of Palaearctic Tachinidae (Diptera). *Stuttgarter Beiträge zur Naturkunde*, (A)369: 1–288.
- Latreille, P.A. 1810. *Considérations générales sur l'ordre naturel des animaux composants les classes des Crustacés, des Arachnides, et des Insectes*... 444 pp. Schoell, Paris.
- Linnaeus, C. 1758. *Systema Naturae*, Ed. 10, vol. 1. 824 pp. Salvii, Holmiae.
- MacLeay, W.S. 1825. *Annulosa Javanica*, no. 1. xii, 50 pp., 1 pl. Kingsbury, Parbury and Allen. London.
- Mannerheim, C.G. 1830. *Précis d'un nouvel arrangement de la famille des brachélytres, de l'ordre des insectes coléoptères*. 87 pp. St. Petersburg.
- Meigen, J.W. 1800. *Nouvelle classification des mouches à deux ailes (Diptera L.) d'après un plan tout nouveau*. 40 pp. Perronneau, Paris.
- Meigen, J.W. 1803. Versuch einer neuen Gattungseintheilung der europäischen zweiflügeligen Insekten. *Magazin für Insektenkunde (Illiger)*, 2: 259–281.
- Outerelo Dominguez, R. & Gamarra Hidalgo, P. 1985. Las familias y géneros de los estafilínidos de la Península Ibérica. *Claves para la identificación de la fauna española*, part 10. 139 pp. Universidad Complutense, Madrid.

- Robineau-Desvoidy, A.J.B.** 1830. Essai sur les Myodaires. *Mémoires présentés par divers savants à l'Académie Royale des Sciences de l'Institut de France*, (2)2: 1-813.
- Sabrosky, C.W. & Arnaud, P.H., Jr.** 1965. Family Tachinidae. Pp. 961-1108 in Stone, A., Sabrosky, C.W., Wirth, W.W., Foote, R.H. & Coulson, T.R. (Eds.), *A catalog of the Diptera of America north of Mexico*. Agricultural Handbook no. 276. iv, 1696 pp. U.S. Department of Agriculture, Washington, D.C.
- Wood, D.M.** 1987. Tachinidae. Pp. 1193-1269 in McAlpine, J.F. (Ed.), *Manual of Nearctic Diptera*, vol. 2. Monograph No. 28. Pp. 675-1332. Biosystematics Research Centre, Agriculture Canada, Ottawa.
- Zimin, L.S., Zinov'eva, K.B. & Shtakel'berg, A.A.** 1970. Family Tachinidae (Larvaevoridae). Pp. 678-798 in Bei-Bienko, G. Ya. (Ed.), *Opredelitel nasekomykh Europeiskoi chasti SSSR*, vol. 5, part 2. 943 pp. Nauka, Leningrad. [Translated into English (1988) as Family Tachinidae (Larvaevoridae). Pp. 1111-1310 in *Keys to the insects of the European part of the U.S.S.R.*, vol. 5, part 2. xxii, 1505 pp. Smithsonian Institution Libraries, Washington, D.C.]

Case 2803

***Copromyza limosa* Fallén, 1820 (currently *Leptocera* (*Rachispoda*) *limosa*; Insecta, Diptera): proposed replacement of lectotype, so conserving usage of the specific name and also that of *Leptocera* (*Rachispoda*) *lutosa* (Stenhammar, 1855)**

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Abstract. The purpose of this application is to conserve the specific name of the common Holarctic saprophagous sphaerocerid fly *Leptocera limosa* (Fallén, 1820) in its current usage. In 1972 one of the female syntypes was designated as the lectotype, but this has now been identified as *Leptocera lutosa* (Stenhammar, 1855). It is proposed that a male syntype should be designated as replacement lectotype.

1. Fallén (1820, p. 8) established the name *Copromyza limosa* based on an unstated number of specimens. Four probable syntypes (three females and one male) are in the Diptera Collection of the Naturhistoriska Riksmuseum, Stockholm. Another male specimen with a handwritten label and a small red square in the collection in Lund University may also be a syntype of this species (see Kim, 1972, p. 205). In 1967 Kim found and examined these specimens at the two institutions and (1972, p. 205) designated as lectotype of *Copromyza limosa* a female in Fallén's collection at Stockholm bearing his handwritten label '*C. limosa* ♀'. Kim also designated as paralectotypes one male (without Fallén's label) and one female. The third female syntype, with Fallén's handwritten label '*C. limosa* ♂', was identified as *Leptocera lutosa* (Stenhammar, 1855).

2. *Limosina lutosa* was first described by Stenhammar (1855, p. 380). The male lectotype and four male and one female paralectotypes, designated by Kim (1972, p. 206), are in the Stenhammar collection at Uppsala University.

3. Prior to Duda's work (1918, pp. 51, 59) both names *limosa* and *lutosa* had been used in a confusing manner. The distinction between these two taxonomic species was not generally recognised until more recent work (e.g. Richards, 1930; Duda, 1938), particularly that of Sabrosky (1949) which included genitalia studies. Duda's (1918) redescription of *limosa* has been accepted by subsequent workers. *Leptocera limosa* and *L. lutosa* are common Holarctic saprophagous flies which have been dealt with in numerous taxonomic papers and recorded in almost all synecological studies, particularly those dealing with marshy and shore ecosystems. A representative list of 27 publications is held by the Commission Secretariat.

4. In 1989 Roháček, in his monographic research on the western Palearctic species of *Rachispoda*, discovered a problem with the lectotype designation of *limosa* (see Roháček, 1991). Of the four syntypes at Stockholm, only the male designated by Kim (see para. 1 above) as a paralectotype belongs to the taxon currently interpreted as *limosa*; the other three females, including the lectotype, belong to the taxon known as *lutosa*. If Kim's lectotype designation is maintained the nominal taxon *Leptocera* (*Rachispoda*) *lutosa* would be a junior synonym of *L. (R.) limosa* and a new name would be needed for the taxon currently known as *limosa*. This would cause endless confusion in the taxonomy of the *Leptocera limosa/lutosa* complex and slow the progress of work in the taxonomy and biology of the SPHAEROCERIDAE. It is important that the current use of the nominal taxa *limosa* and *lutosa* should remain unchanged.

5. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to set aside the lectotype designation made by Kim (1972) for *Copromyza limosa* Fallén, 1820, and to designate in its place as lectotype the male syntype in Stockholm;
- (2) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *limosa* Fallén, 1820, as published in the binomen *Copromyza limosa* and as defined by the lectotype designated in (1) above;
 - (b) *lutosa* Stenhammar, 1855, as published in the binomen *Limosina lutosa* and as defined by the lectotype designated by Kim (1972).

Acknowledgements

We are indebted to Dr S.A. Marshall (*Department of Environmental Biology, University of Guelph, Canada*), Dr Allen L. Norrbom (*USDA/ARS, U.S. National Museum, Washington, D.C., U.S.A.*), Dr Brian R. Pitkin (*Department of Entomology, The Natural History Museum, London, U.K.*) and Dr Curtis W. Sabrosky (formerly of the *Systematic Entomology Laboratory, USDA/ARS, U.S. National Museum, Washington, D.C., U.S.A.*) for making invaluable suggestions and editorial comments, and for their support for this application.

References

- Duda, O. 1918. Revision der Europäischen Arten der Gattung *Limosina* Macquart (Dipteren). *Abhandlungen der K.K. Zoologisch-Botanischen Gesellschaft in Wien*, **10**(1): 1–240.
- Duda, O. 1938. Sphaeroceridae (Cypselidae). Pp. 1–182 in Lindner, E. (Ed.), *Die Fliegen der Palaearktischen Region*. Schweizerbart, Stuttgart.
- Fallén, C.F. 1820. *Diptera Sueciae Heteromyzides*. 10 pp. Berlingianis, Lundae.
- Kim, K.C. 1972. Notes on types of Sphaeroceridae by Fallén, Stenhammar, and Zetterstedt, with lectotype of *Copromyza equina*. (Fall.) (Diptera). *Entomological News*, **83**: 203–217.
- Richards, O.W. 1930. The British species of Sphaeroceridae (Borboridae, Diptera). *Proceedings of the Zoological Society of London*, **1930**: 261–345.
- Roháček, J. 1991. A monograph of *Leptocera* (*Rachispoda* Lioy) of the West Palearctic area (Diptera, Sphaeroceridae). *Časopis Slezského Muzea Opava*, (A)**40**: 97–288.
- Sabrosky, C.W. 1949. '*Leptocera lutosa*': a complex of Nearctic species. *Proceedings of the Entomological Society of Washington*, **51**: 1–24.
- Stenhammar, C. 1855. Skandinavien's Copromyzinae granskade och beskriarne. *Kongl. Vetenskaps-Akademiens Handlingar*, **1853**: 257–442.

Case 2804

***Drosophila putrida* Sturtevant, 1916 (Insecta, Diptera): proposed replacement of the holotype by a neotype**

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Abstract. The purpose of this application is to designate a neotype in accordance with current usage for the nominal species *Drosophila putrida* Sturtevant, 1916. Examination of the holotype shows that it belongs to an un-named species which has been consistently misidentified as *Drosophila testacea* von Roser, 1840. *D. putrida* is widely used in ecological, genetic and evolutionary studies and is restricted to the eastern U.S.A.

1. North America has two species belonging to the small, Holarctic *Drosophila testacea* species group. Their species status and nomenclature have never been critically examined and some confusion exists, partly as a result of the long and consistent misidentification of *Drosophila putrida* Sturtevant, 1916. The holotype of *putrida* is a male in perfect condition in the American Museum of Natural History (type locality: Woods Hole, Massachusetts, U.S.A.). I recently examined the holotype and its paratypes. The specimens actually belong to a species which since about 1940 has been misidentified as *Drosophila testacea* von Roser, 1840.

2. Confusion began when two externally distinct North American species in the group were fully recognized, and the name *testacea* was applied to the species most similar to the true (European) *testacea*, although current work has shown that the North American '*testacea*' is a different, morphocryptic species. Few voucher specimens exist in collections from all the biological work done on the two North American species, so it is impossible to confirm the identity of the *putrida*/*testacea*' referred to in older papers. However, there are specimens collected in Austin, Texas in the 1940's in the University of Texas collection at the American Museum of Natural History which have labels identifying *putrida* in the sense recognized today. Patterson & Stone (1952) distinguished the two species on the basis still adhered to, as does Strickberger's (1962) key which is in wide use today. Apparently, no one had ever checked Sturtevant's type specimen of *putrida*.

3. The three species in the *testacea*-group are abundant inhabitants of forests, and have been favored subjects for studies in ecology, genetics and evolution. An extensive literature exists; major papers that treat either one or both of the Nearctic species are the following: Carson & Stalker, 1951 (breeding sites); Dorsey & Carson, 1956 (host finding behavior); Grimaldi, 1985 (niche biology); Grimaldi & Jaenike, 1983 (*putrida* hosts), 1984 (larval competition); Jaenike, 1978, 1986 (host selection), 1988 (parasitism of '*testacea*'); Jaenike & Grimaldi, 1983 (oviposition population genetics); Jaenike et al., 1983 (toxin resistance); James & Jaenike, 1990 ('sex ratio' meiotic drive); Lacy, 1982, 1983, 1984 (host use and population genetics); Levitan, 1954 (distributional

records); Miller & Weeks, 1964 (distributional records); Montague & Jaenike, 1985 (parasitism); Patterson & Stone, 1952 (distributions, internal reproductive organs, distinguishing characters, chromosomes); Patterson & Wagner, 1943 (distributions); Patterson & Wheeler, 1949 (North American *Drosophila* catalogue); Sabath, Richmond & Torella, 1973 (temperature controlled color polymorphism); Strickberger, 1962 (key to North American *Drosophila*); Throckmorton, 1962a, 1962b, 1975 (*Drosophila* phylogeny); Ward, 1949 (metaphase chromosomes); Wharton, 1943 (metaphase chromosomes); Wheeler, 1981a (world catalogue); Wheeler, 1981b (Nearctic fauna). Adoption of *putrida* in the sense of the holotype would cause serious confusion because the name, as used in the above literature, would be transferred to the other species. The references listed in this paragraph all agree upon a diagnosis of *putrida* as having a pair of presutural acrostichal setulae that are stouter, decumbent and only about twice the length of other, standard acrostichal setulae.

4. A revision of the *testacea*-group is completed, utilizing adult specimens from all known localities of the range, as well as electrophoresis studies, mating tests and ecological characteristics. There is no doubt that the species represented by the *D. putrida* neotype proposed below, from New Jersey, also occurs in the locality (Massachusetts) of the holotype and that no other species share the diagnostic traits of the proposed neotype.

5. In accordance with Recommendation 75E of the Code, I refer the case to the Commission to set aside the existing type material of *D. putrida* and to confirm the designation of a neotype belonging to the taxonomic species that North American *Drosophila* workers have been consistently referring to as *putrida* for the last 50 years. What has been called '*testacea*' in North America needs a new name, diagnosis and designated type. The *putrida* neotype I propose is an adult male specimen labelled as '*Drosophila* (*D.*) *putrida* Sturtevant, 1916, NEOTYPE, Det. D.A. Grimaldi' from 'U.S.A.: New Jersey: Morris County, Pompton Plains, June, 1986, D.A. Grimaldi, coll.', and deposited in the American Museum of Natural History. No problem would exist in reconciling Sturtevant's original (1916) and subsequent (1921) descriptions of *putrida* with the neotype, since he omitted crucial diagnostic details of the presutural setae which externally distinguish the species. His description could apply to any of the *testacea*-group species; indeed, it was this insufficiently detailed description that contributed to the continued misidentification.

6. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to set aside all previous fixations of type specimens for the nominal species *Drosophila putrida* Sturtevant, 1916 and to confirm the neotype designation proposed in para. 5 above;
- (2) to place on the Official List of Specific Names in Zoology the name *putrida* Sturtevant, 1916, as published in the binomen *Drosophila putrida* and as defined by the neotype designated in (1) above.

Acknowledgements

I am grateful to Curtis W. Sabrosky for his suggestions on an early draft of this proposal, and to John Jaenike and Avis James (University of Rochester) for additional references and collaborative work on the species status of American and European '*testacea*'.

References

- Carson, H.L. & Stalker, H.D. 1951. Natural breeding sites for some wild species of *Drosophila* in the Eastern United States. *Ecology*, **32**: 317–330.
- Dorsey, C.K. & Carson, H.L. 1956. Selective responses of wild Drosophilidae to natural and artificial attractants. *Annals of the Entomological Society of America*, **49**: 177–181.
- Grimaldi, D. 1985. Niche separation and competitive coexistence in mycophagous *Drosophila* (Diptera: Drosophilidae). *Proceedings of the Entomological Society of Washington*, **87**: 498–511.
- Grimaldi, D. & Jaenike, J. 1983. The Diptera breeding on skunk cabbage, *Symplocarpus foetidus* (Araceae). *Journal of the New York Entomological Society*, **91**: 83–89.
- Grimaldi, D. & Jaenike, J. 1984. Competition in natural populations of mycophagous *Drosophila*. *Ecology*, **65**: 1113–1120.
- Jaenike, J. 1978. Host selection by mycophagous *Drosophila*. *Ecology*, **59**: 1286–1288.
- Jaenike, J. 1983. Intraspecific variation for resource use in *Drosophila*. *Biological Journal of the Linnean Society*, **27**: 47–56.
- Jaenike, J. 1988. Parasitism and male mating success in *Drosophila testacea*. *American Naturalist*, **131**: 774–780.
- Jaenike, J. & Grimaldi, D. 1983. Genetic variation for host preference within and among populations of *Drosophila tripunctata*. *Evolution*, **37**: 1023–1033.
- Jaenike, J., Grimaldi, D.A., Sluder, A.E. & Greenleaf, A.L. 1983. α -Amanitin tolerance in mycophagous *Drosophila*. *Science*, **221**: 165–167.
- James, A.C. & Jaenike, J. 1990. 'Sex ratio' meiotic drive in *Drosophila testacea*. *Genetics*, **126**: 651–656.
- Lacy, R.C. 1982. Niche breadth and abundance as determinants of genetic variation in populations of mycophagous drosophilid flies (Diptera: Drosophilidae). *Evolution*, **36**: 1265–1275.
- Lacy, R.C. 1983. Structure of genetic variation within and between populations of mycophagous *Drosophila*. *Genetics*, **104**: 81–94.
- Lacy, R.C. 1984. Predictability, toxicity, and trophic niche breadth in fungus-feeding Drosophilidae (Diptera). *Ecological Entomology*, **9**: 43–54.
- Levitan, M. 1954. Drosophilidae in New York and New Jersey. *The American Midland Naturalist*, **52**: 453–459.
- Miller, D.D. & Weeks, L. 1964. *Drosophila* collections near the Blue Ridge of southwestern North Carolina. *The American Midland Naturalist*, **72**: 93–114.
- Montague, J.R. & Jaenike, J. 1985. Nematode parasitism in natural populations of mycophagous drosophilids. *Ecology*, **66**: 624–626.
- Patterson, J.T. & Stone, W.S. 1952. *Evolution in the genus Drosophila*. 610 pp. MacMillan, New York.
- Patterson, J.T. & Wagner, R.P. 1943. Geographical distribution of species of the genus *Drosophila* in the United States and Mexico. *University of Texas Publications*, **4313**: 217–281.
- Patterson, J.T. & Wheeler, M.R. 1949. Catalogue of described species belonging to the genus *Drosophila*, with observations on their geographical distribution. *University of Texas Publications*, **4920**: 207–233.
- Sabath, M.D., Richmond, R.C. & Torella, R.M. 1973. Temperature-mediated seasonal color changes in *Drosophila putrida*. *The American Midland Naturalist*, **90**: 509–512.
- Strickberger, M.W. 1962. Key to United States species of the genus *Drosophila*. Pp. 111–122 in Strickberger, M.W. (Ed.), *Experiments in Genetics with Drosophila*. Wiley, New York.
- Sturtevant, A.H. 1916. Notes on North American Drosophilidae with descriptions of twenty-three new species. *Annals of the Entomological Society of America*, **9**: 323–343.
- Sturtevant, A.H. 1921. The North American species of *Drosophila*. *Carnegie Institute of Washington Publications*, **301**: 1–150.
- Throckmorton, L.H. 1962. The problem of phylogeny in the genus *Drosophila*. *University of Texas Publications*, **6205**: 207–343.

- Throckmorton, L.H.** 1962. The use of biochemical characteristics for the study of problems of taxonomy and evolution in the genus *Drosophila*. *University of Texas Publications*, **6205**: 415–487.
- Throckmorton, L.H.** 1975. The phylogeny, ecology, and geography of *Drosophila*. Pp. 421–469 in King, R.C. (Ed.), *Handbook of genetics*, vol. 3. Plenum, New York.
- Ward, C.L.** 1949. Karyotype variation in *Drosophila*. *University of Texas Publications*, **4920**: 70–79.
- Wharton, L.T.** 1943. Analysis of the metaphase and salivary chromosome morphology within the genus *Drosophila*. *University of Texas Publications*, **4313**: 282–319.
- Wheeler, M.R.** 1981a. The Drosophilidae: a taxonomic overview. Pp. 1–97 in Ashburner, M., Carson, H.L. & Thompson, J.N. (Eds.), *The genetics and biology of Drosophila*, vol. 3a. 429 pp. Academic Press, New York.
- Wheeler, M.R.** 1981b. Geographical survey of Drosophilidae: Nearctic species. Pp. 99–121 in Ashburner, M., Carson, H.L. & Thompson, J.N. (Eds.), *The genetics and biology of Drosophila*, vol. 3a. 429 pp. Academic Press, New York.

Case 2706**EPHYDRIDAE Zetterstedt, 1837 (Insecta, Diptera): proposed precedence over GYMNOMYZIDAE Latreille, 1829**

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Abstract. The purpose of this application is to conserve the long and universally used name EPHYDRIDAE Zetterstedt, 1837 for shore flies, despite the existence of the older family-group name 'Gymnomyzides' Latreille, 1829, based on *Gymnomyza* Fallén, 1810 (a junior subjective synonym of *Mosillus* Latreille, 1804). The authors advocate usage of subfamily and tribe names based on *Gymnomyza*, but retention of EPHYDRIDAE for the family.

1. As part of a world catalogue on the dipterous family EPHYDRIDAE, commonly known as shore flies, we recently compiled a list of all family-group names for the purpose of determining their correct Latin orthography, date and authorship. In so doing we discovered a few discrepancies in family-group names published in recent catalogues (Wirth, 1965, 1968; Cogan & Wirth, 1977; Cogan, 1980, 1984; Mathis, 1989). These points for the most part are minor and will be remedied in the forthcoming catalogue, but one will require a ruling by the plenary powers of the Commission, which is the purpose of this application. We have discussed the issues in this case elsewhere (Mathis & Zatwarnicki, 1990).

2. Latreille (1829, p. 535) proposed the family-group name 'Gymnomyzides (*Gymnomyzides*)', basing it on the generic name *Gymnomyza* Fallén, 1810 (p. 19, as the 8th division of *Musca* but with no included species (see para. 6)). Although the family-group name was used in a subsequent publication (Audouin, Blanchard, Doyère & Milne Edwards, 1849, pp. 421, 423) and in translations such as those by M'Murtrie (1831) and Griffith & Pidgeon (1832, p. 716), it was not adopted generally by contemporaries (Meigen, 1830, 1838; Haliday, 1837, 1839; Stenhammar, 1844; Loew, 1860; Schiner, 1864), and for almost 150 years it has remained unused.

3. Eight years after Latreille's proposal of GYMNOMYZIDAE, Zetterstedt (1837, p. 48) proposed the subfamily name EPHYDRINAE based on *Ephydra* Fallén, 1810 (p. 22). The type species of this genus is *Ephydra riparia* Fallén, 1813 (p. 246) by subsequent designation of Curtis (1832, pl. 413, text). All subsequent authors known to us have used EPHYDRIDAE as the family name, although sometimes with a variant spelling. In a previous application by one of us (W.N.M.), published in 1981 (BZN 38: 201-204) and

which resulted in Opinion 1321 (BZN 42: 177–179; June 1985) giving EPHYDRIDAE precedence over HYDRELLIINAE Robineau-Desvoidy, 1830, 12 representative references were cited; we now add Canzoneri & Meneghini (1983), Mathis (1989), Mathis & Zatwarnicki (1990) and others cited in this application. The names EPHYDRIDAE, *Ephydra* and its type species *E. riparia* were placed on the relevant Official Lists in Opinion 1321.

4. The precedence of EPHYDRIDAE Zetterstedt (1837, p. 47) over GYMNOZYIDAE Latreille (1829, p. 536) seems clearly warranted and in the interest of nomenclatural stability. Latreille's name has been used by us at subfamilial and tribal levels (Mathis & Zatwarnicki, 1990; Mathis, 1991a, 1991b; Zatwarnicki, 1991, 1992).

5. Suppression of *Gymnomyza*, and thus rendering as unavailable any family-group name based on it, is an option we considered for resolving this case but we do not advocate it for the following reason. PSILOPINAE Cresson, 1925 (p. 241; based on *Psilopa* Fallén, 1823), the relevant subfamilial name currently used (e.g. in the works mentioned in paras. 1 and 3 and elsewhere) at present includes two family-group nominal taxa that are older. Apart from GYMNOPIINI (see below) the family-group name LIPOCHAETINI Becker, 1896 (p. 275; based on *Lipochaeta* Coquillett, 1896, p. 220) is much older than PSILOPINAE and might replace the latter regardless of the status of names based on *Gymnomyza*. However, the relationships of *Lipochaeta* and related genera to other tribes are not fully resolved (Mathis & Zatwarnicki, 1990), and the tribe may prove to be a specialized lineage within another shore-fly subfamily. We feel that adhering to priority at the subfamilial and tribal levels will best serve stability. Family-group names based on *Gymnomyza* are the oldest in the family and are the least likely ever to need replacement. At the tribal level, GYMNOZYINI Latreille, 1829 will replace GYMNOPIINI Cresson, 1922 (p. 326), based on *Gymnopa* Fallén, 1820 (p. 10).

6. A type species was not assigned to *Gymnomyza* nor were any named species ever included in the genus; Fallén (1810) included an unnamed species. We (Mathis & Zatwarnicki, 1990, p. 10) have designated *Syrphus subsultans* Fabricius, 1794 (p. 304) as the type species. This nominal species is a senior subjective synonym both of *Gymnopa aenea* Fallén, 1820 (p. 10), the type species of *Gymnopa*, and of *Mosillus arcuatus* Latreille, 1805 (p. 390), the type species of *Mosillus* Latreille, 1804 (p. 196). The synonymy of *Gymnomyza* and *Mosillus* was first suggested by Hendel (1910, p. 310); *Mosillus* is the valid name and in recent years has been that in use for the genus, but no family-group name has been based on it.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to rule that family-group names based on *Ephydra* Fallén, 1810 are to have precedence over those based on *Gymnomyza* Fallén, 1810 (a junior subjective synonym of *Mosillus* Latreille, 1804);
- (2) to place on the Official List of Generic Names in Zoology the name *Mosillus* Latreille, 1804 (gender: masculine), type species by subsequent monotypy by Latreille (1805) *Mosillus arcuatus* Latreille, 1805 (a junior subjective synonym of *Syrphus subsultans* Fabricius, 1794, type species of *Gymnomyza* Fallén, 1810);
- (3) to place on the Official List of Specific Names in Zoology the name *subsultans* Fabricius, 1794, as published in the binomen *Syrphus subsultans* (a senior subjective synonym of *Mosillus arcuatus* Latreille, 1805, the type species of *Mosillus*

Latreille, 1804, and the specific name of the type species of *Gymnomyza* Fallén, 1810);

- (4) to place on the Official List of Family-Group Names in Zoology the name GYMNOZYDIAE Latreille, 1829 (type genus *Gymnomyza* Fallén, 1810, a junior subjective synonym of *Mosillus* Latreille, 1804) with an endorsement that it and other family-group names based on *Gymnomyza* are not to be given priority over EPHYDRIDAE Zetterstedt, 1837 and other family-group names based on *Ephydra* Fallén, 1810 whenever *Ephydra* and *Mosillus* or *Gymnomyza* are placed in the same family-group taxon;
- (5) to add to the entry on the Official List of Family-Group Names in Zoology for EPHYDRIDAE Zetterstedt, 1837 an endorsement that it is to be given precedence over GYMNOZYDIAE Latreille, 1829 (type genus *Gymnomyza* Fallén, 1810 (a junior subjective synonym of *Mosillus* Latreille, 1804)) whenever *Ephydra* and *Mosillus* or *Gymnomyza* are placed in the same family-group taxon.

References

- Audouin, J.V., Blanchard, E.H.N., Doyère, L. & Milne Edwards, H. 1849. *Les insectes*. In Cuvier, G.L.C.F.D., *Le règne animal distribué d'après son organisation*...., Ed. 4, vol. 2. 443 pp. Paris.
- Becker, T. 1896. Dipterologische Studien 4. Ephydridae. *Berliner Entomologische Zeitschrift*, 41(2): 91–276.
- Canzoneri, S. & Meneghini, G. 1983. Ephydridae e Canaceidae. *Fauna d'Italia*, 20: 1–337.
- Cogan, B.H. 1980. Family Ephydridae. Pp. 655–669 in Crosskey, R.W. (Ed.), *A catalogue of the Diptera of the Afrotropical Region*. 1437 pp. British Museum (Natural History), London.
- Cogan, B.H. 1984. Family Ephydridae. Pp. 126–176 in Soós, A. & Papp, L. (Eds.), *Catalogue of Palaearctic Diptera*, vol. 10. 402 pp. Elsevier, Budapest.
- Cogan, B.H. & Wirth, W.W. 1977. Family Ephydridae. Pp. 321–339 in Delfinado, M.D. & Hardy, D.E. (Eds.), *A catalog of the Diptera of the Oriental Region*, vol. 3 (Suborder Cyclorrhapha excluding Division Aschiza). 854 pp. University Press of Hawaii, Honolulu.
- Coquillett, D.W. 1896. A new subfamily of Ephydridae. *Entomological News*, 7(7): 220–221.
- Cresson, E.T., Jr. 1922. Studies in American Ephydridae (Diptera). III. A revision of the species of *Gymnopa* and allied genera constituting the subfamily Gymnopinae. *Transactions of the American Entomological Society*, 47(4): 325–343.
- Cresson, E.T., Jr. 1925. Studies in the dipterous family Ephydridae, excluding the North and South American faunas. *Transactions of the American Entomological Society*, 51(3): 227–258.
- Curtis, J. 1832. *British entomology; being illustrations and descriptions of the genera of insects found in Great Britain and Ireland*...., vol. 9. Unnumbered pages, pls. 386–433. Author, London.
- Fabricius, J.C. 1794. *Entomologia systematica emendata et aucta*...., vol. 4. 472 pp. Proft, Hafniae.
- Fallén, C.F. 1810. *Specimen entomologicum novam Diptera disponendi methodum exhibens*. 26 pp., 1 pl. Lund.
- Fallén, C.F. 1813. Beskrifning Öfver några i Sverige funna Vattenflugor (Hydromyzides). *Kongliga Vetenskaps-Akademiens Handlingar*, 1813: 240–257.
- Fallén, C.F. 1820. Oscinides Sveciae. 10 pp. In: *Diptera Sveciae*....continens, vol. 2. Unnumbered pages. Lund.
- Fallén, C.F. 1823. Hydromyzides Sveciae. 12 pp. In: *Diptera Sveciae*....continens, vol. 2. Unnumbered pages. Lund.
- Griffith, E. & Pidgeon, E. 1832. The class Insecta arranged by the Baron Cuvier, with supplementary additions to each order, and notices of new genera and species by George Gray, Esq.

- Volume the second. In Griffith, E. et al. (Eds.), *The animal kingdom arranged in conformity with its organization by the Baron Cuvier*, vol. 15. 796 pp. Whittaker, Treacher, London.
- Haliday, A.H.** 1837. Notes, &c upon Diptera. *The Entomological Magazine*, **4**(2): 147–152.
- Haliday, A.H.** 1839. Remarks on the generic distribution of the British Hydromyzidae (Diptera). *Annals of Natural History*, **3**: 217–224, 401–411.
- Hendel, F.** 1910. Über die Nomenklatur der Acalyptatengattungen nach Th. Beckers Katalog der paläarktischen Dipteren, Bd. 4. *Wiener Entomologische Zeitung*, **29**: 307–313.
- Latreille, P.A.** 1804. Tableau méthodique des insectes. Pp. 129–200 in: *Nouveau dictionnaire d'histoire naturelle*, vol. 24. (Caractères et Tables). 258 pp., 5 pls. Déterville, Paris.
- Latreille, P.A.** 1805. *Histoire naturelle, générale et particulière des crustacés et des insectes*, vol. 14. 432 pp. Dufart, Paris.
- Latreille, P.A.** 1829. Suite et fin des insectes. In Cuvier, G.C.L.F.D., *Le règne animal distribué d'après son organisation*..., Ed. 2, vol. 5. 556 pp., 20 pls. Paris.
- Loew, H.** 1860. Die Europaeischen Ephydrinidae und die bisher in Schlesien beobachteten Arten derselben. In: *Neue Beiträge zur Kenntniss der Dipteren*, part 7. 46 pp. Mittler, Berlin.
- Mathis, W.N.** 1989. Family Ephyrididae. Pp. 639–649 in Evenhuis, N.L. (Ed.), *Catalog of the Diptera of the Australasian and Oceanian Regions*, special publication no. 86. 1155 pp. Bishop Museum Press, Honolulu.
- Mathis, W.N.** 1991a. Studies of Gymnomyzinae (Diptera: Ephyrididae), III: A revision of the shore fly subgenus *Pseudohecamede* Hendel of the genus *Allotrichoma* Becker. *Smithsonian Contributions to Zoology*, **522**: 1–28.
- Mathis, W.N.** 1991b. Classification of the shore flies (Diptera: Ephyrididae), past, present, and future. Pp. 209–227 in Weismann, L., Országh, I. & Pont, A.C. (Eds.), *Proceedings of the Second International Congress of Dipterology*. 468 pp. SPB Academic Publishing, The Hague.
- Mathis, W.N. & Zatwarnicki, T.** 1990. Taxonomic notes on Ephyrididae (Diptera). *Proceedings of the Biological Society of Washington*, **103**(4): 891–906.
- Meigen, J.W.** 1830. *Systematische Beschreibung der bekannten europäischen zweiflügeligen Insekten*, vol. 6. xi, 401 pp. Hamm.
- Meigen, J.W.** 1838. *Systematische Beschreibung der bekannten europäischen zweiflügeligen Insekten*, vol. 7. 434 pp. Hamm.
- M'Murtrie, H.** 1831. *The animal kingdom arranged in conformity with its organization, by the Baron Cuvier. The Crustacea, Arachnides and Insecta. Translated from the French with notes and additions*, vol. 4. 495 pp. New York.
- Schiner, I.R.** 1864. Die Fliegen (Diptera). Pp. 81–288 in: *Fauna Austriaca*, vol. 2. xxxii, 658 pp. Wien.
- Stenhammar, C.** 1844. Försök till gruppering och revision af de svenska Ephydrinae. *Kongliga Vetenskaps-Academiens Handlingar*, **1843**(3): 75–272.
- Wirth, W.W.** 1965. Family Ephyrididae. Pp. 734–759 in Stone, A., Sabrosky, C.W., Wirth, W.W., Foote, R.H. & Coulson, J.R. (Eds.), *A catalog of the Diptera of America north of Mexico*. Agricultural Handbook No. 276. iv, 1696 pp. United States Department of Agriculture, Washington.
- Wirth, W.W.** 1968. Family Ephyrididae. In Papavero, N. (Ed.), *A catalog of the Diptera of the Americas south of the United States*, part 77. 43 pp. Departamento de Zoologia, Secretária de Agricultura, São Paulo.
- Zatwarnicki, T.** 1991. Changes in nomenclature and synonymies of some genera and species of Ephyrididae (Diptera). *Deutsche Entomologische Zeitschrift*, **39**(4): 295–333.
- Zatwarnicki, T.** 1992. A new classification of Ephyrididae based on phylogenetic reconstruction (Diptera Cyclorrhapha). *Genus*, **3**(2): 65–119.
- Zetterstedt, J.W.** 1837. Conspectus familiarum, generum et specierum dipterorum, in fauna insectorum Lapponica descriptorum. *Isis* (von Oken), **1837**: 26–67.

Case 2718

***Clidastes* Cope, 1868 (Reptilia, Sauria): proposed designation of *Clidastes propython* Cope, 1869 as the type species**

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Abstract. The purpose of this application is to designate *Clidastes propython* Cope, 1869 as the type species of the North American Upper Cretaceous mosasaur genus *Clidastes* Cope, 1868, in accordance with universal understanding and usage. At present the genus has a nominal type species, *C. iguanavus* Cope, 1868, which is indistinguishable from some species of *Mosasaurus* Conybeare in Parkinson, 1822 and is from a later geological horizon than *Clidastes* as generally used.

1. Cope (1868a, p. 181) proposed the new generic and specific names *Clidastes iguanavus* for a single anterior thoracic vertebra of a mosasauroid lizard from 'a marl pit near Swedesboro', Gloucester Co., N.J.' (Cope, 1868b, p. 233). The holotype, no. 1601 in the Peabody Museum of Natural History, Yale University, was collected from the Marshalltown Formation of the Matawan Group (Late Campanian, Upper Cretaceous). The nominal species *iguanavus* is thus the type of *Clidastes* by monotypy.

2. Recently, a re-examination of the single vertebra referred to *Clidastes iguanavus* has indicated that it is indistinguishable from anterior thoracic vertebrae of some members of the genus *Mosasaurus* Conybeare in Parkinson, 1822 (p. 298) (family MOSASAURIDAE Gervais, 1853, p. 471). The specimen is insufficient for identification to species level but closely resembles *Mosasaurus conodon* (Cope, 1881) (p. 588). *Clidastes iguanavus* is based on material inadequate for definitive diagnosis and should be considered a nomen dubium or, following Mones (1989, p. 232), a nomen vanum (i.e. an available but taxonomically unassignable name). The name *iguanavus* was included in a faunal list for the Marshalltown Formation (Russell, 1988, p. 34) but, other than Cope's holotype, I have found no instance of material being referred to the nominal species.

3. A further 12 nominal species were subsequently included in *Clidastes* (see Merriam, 1894, p. 35). Russell (1967, pp. 121, 124–131) synonymized many of these nominal species and recognized only four taxa: *C. propython* Cope, 1869 (p. 258), *C. liodontus* Merriam, 1894 (p. 35) and *C. sternbergii* Wiman, 1922 (p. 13, text-figs. 4–9, pls. 3–4), which were based on well defined material, and *C. iguanavus* Cope, 1868. Later, Russell (1970, pp. 369–371) placed *sternbergii* in the genus *Halisaurus* Marsh, 1869 (p. 395). Under my previous name (Wright, 1987, p. 99) I included in *Clidastes* an as yet undescribed species from the Early Campanian of Alabama, Nebraska and Wyoming.

4. In addition to *Clidastes iguanavus* being indeterminate, recent advances in mosasaur biostratigraphy have favored the abandonment of this nominal species as the

type of the genus. Russell (1967, pp. 205–206) reported a change in the composition of North American mosasaur faunas between the Early and Late Campanian. Wright (1986a, p. 146; 1986b, p. A51) has documented this phenomenon in Alabama and the western interior of the U.S.A., and concluded that *Clidastes* (sensu *propython*) is not known to occur later than the Early Campanian. However, the holotype of *C. iguanavus* was collected from sediments of Late Campanian age and is the only post-Middle Campanian specimen from North America purported to belong to *Clidastes*.

5. Wright (1987, p. 99) recognized the difficulties surrounding the name *Clidastes iguanavus* and suggested that *Clidastes* be considered a nomen vanum and that it could be replaced with its junior synonym *Edestosaurus* Marsh, 1871 (p. 447). However, *Clidastes* is one of the most widely known names in the MOSASAURIDAE. The taxon dominates many mosasaur assemblages and hundreds of specimens are found in collections around the world. For 123 years *Clidastes* has been considered a valid generic name in all taxonomic, morphological, paleoecological and biostratigraphic literature concerning the MOSASAURIDAE, particularly in the last three decades (see, for example, the recent works of Romer (1971), Thurmond & Jones (1981) and Carroll (1988); a representative list of a further 12 references demonstrating the usage of the name is held by the Commission Secretariat). The ubiquity of the name has been strengthened by the occasional use of the informal taxonomic word 'clidastoid' when speaking of *Clidastes* and its descendants (see, for example, Russell, 1967, p. 206). Replacement of the name *Clidastes* with the obscure junior synonym *Edestosaurus* will not promote nomenclatural stability. Such an action would encounter considerable resistance and would lead to a protracted period of confusion and I therefore recommend retention of *Clidastes*.

6. I propose that the Commission use its plenary powers to designate *Clidastes propython* Cope, 1869 (p. 258) as the type species of *Clidastes*. This was the first nominal species described from well preserved material to be included in the genus and is the species on which, de facto, the genus is based. The holotype, no. 10193 in the Academy of Sciences of Philadelphia, was collected from the Mooreville Chalk of the lower Selma Group (Early Campanian, Upper Cretaceous) of west central Alabama. The specimen consists of most of the skull, most of the pectoral girdle, parts of both forelimbs and an incomplete axial skeleton (axis-atlas complex, five cervical, 16 dorsal and 35 caudal vertebrae, and many rib fragments). Adoption of *C. propython* Cope as the type of *Clidastes* will maintain the name in its current universal usage.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to set aside all previous fixations of type species for the nominal genus *Clidastes* Cope, 1868 and to designate *Clidastes propython* Cope, 1869 as the type species;
- (2) to place on the Official List of Generic Names in Zoology the name *Clidastes* Cope, 1868 (gender: masculine), type species by designation in (1) above *Clidastes propython* Cope, 1869;
- (3) to place on the Official List of Specific Names in Zoology the name *propython* Cope, 1869, as published in the binomen *Clidastes propython* (specific name of the type species of *Clidastes* Cope, 1868).

Acknowledgements

I thank S.W. Shannon, G.L. Bell, Jr. and Drs K. Derstler and R.T. Bakker for their suggestions and guidance. Additional thanks are due to the late Dr R.D. Estes.

References

- Carroll, R.L. 1988. *Vertebrate paleontology and evolution*. xiv, 698 pp. Freeman, New York.
- Conybeare, W.D. 1822. Fossil crocodiles and other saurian animals. Pp. 284–304 in Parkinson, J., *Outlines of dryctology. An introduction to the study of fossil organic remains...* vii, 346 pp. Author, London.
- Cope, E.D. 1868a. [Remarks on *Clidastes iguanavus*, *Nectoporphus validus* and *Elasmosaurus*]. *Proceedings of the Academy of Natural Sciences of Philadelphia*, **20**: 181.
- Cope, E.D. 1868b. On some Cretaceous Reptilia. *Proceedings of the Academy of Natural Sciences of Philadelphia*, **20**: 233–242.
- Cope, E.D. 1869. On the reptilian Orders Pythonomorpha and Streptosauria. *Proceedings of the Boston Society of Natural History*, **12**: 250–266.
- Cope, E.D. 1881. A new *Clidastes* from New Jersey. *American Naturalist*, **15**(7): 587–588.
- Gervais, P. 1853. Observations relatives aux reptiles fossiles de France (Deuxième partie). *Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences*, **36**: 470–474.
- Marsh, O.C. 1869. Notice of some new mosasauroid reptiles from the Greensand of New Jersey. *American Journal of Science*, (2)**48**(144): 392–397.
- Marsh, O.C. 1871. Notice of some new fossil reptiles from the Cretaceous and Tertiary formations. *American Journal of Science*, (3)**1**(6): 447–459.
- Merriam, J.C. 1894. Ueber die Pythonomorphen der Kansas-Kreide. *Palaeontographica*, **41**: 1–39.
- Mones, A. 1989. Nomen dubium vs. nomen vanum. *Journal of Vertebrate Paleontology*, **9**(2): 232–234.
- Romer, A.S. 1971. *Vertebrate paleontology*, Ed. 3, Impression 3. viii, 468 pp., 443 text figs. University of Chicago Press, Chicago.
- Russell, D.A. 1967. Systematics and morphology of American mosasaurs. *Bulletin of the Peabody Museum of Natural History*, **23**: 1–241.
- Russell, D.A. 1970. The vertebrate fauna of the Selma Formation of Alabama. Part 7, the mosasaurs. *Fieldiana: Geology Memoirs*, **3**(7): 363–380.
- Russell, D.A. 1988. Checklist of North American marine Cretaceous vertebrates including fresh water fishes. *Occasional Papers of the Tyrrell Museum of Paleontology*, **14**: 1–57.
- Thurmond, J.T. & Jones, D.E. 1981. *Fossil vertebrates of Alabama*. 244 pp. University of Alabama Press, Tuscaloosa.
- Williston, S.W. 1897. Range and distribution of the mosasaurs. *Kansas University Quarterly*, **6**: 177–189.
- Wiman, C. 1922. Some reptiles from the Niobrara group in Kansas. *Bulletin of the Geological Institution of the University of Upsala*, **18**: 9–18.
- Wright, K.R. 1986a. A preliminary report on the biostratigraphic zonation of Alabama mosasaurs. *Journal of the Alabama Academy of Science*, **57**(3): 146.
- Wright, K.R. 1986b. On the stratigraphic distribution of mosasaurs in western and central Alabama. P. A51 in: *Abstracts, Fourth North American Paleontological Convention*. Boulder.
- Wright, K.R. 1987. The mosasaur *Clidastes*: new specimens and new problems. *Journal of the Alabama Academy of Science*, **58**(3): 99.

Case 2784

***Procellaria gigantea* Gmelin, [1789] (currently *Macronectes giganteus*; Aves, Procellariiformes): proposed conservation of usage of the specific name by designation of a neotype**

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Abstract. The purpose of this application is to conserve the current universal understanding and usage of the specific names of *Macronectes giganteus* (Gmelin, [1789]) and *M. halli* Mathews, 1912 for the southern, antarctic and the more northern, subantarctic species of giant petrel respectively (family PROCELLARIIDAE). The name *giganteus* (type species of the genus *Macronectes* Richmond, 1905) was based on a description of the second species. It is proposed that a neotype for *giganteus* be designated.

Résumé. L'objet de cette requête est de conserver l'usage couramment accepté des noms spécifiques de *Macronectes giganteus* (Gmelin, [1789]) et *M. halli* Mathews, 1912 pour, respectivement, le pétrel géant antarctique et le pétrel géant subantarctique (famille des PROCELLARIIDAE). Le nom de *giganteus* (espèce-type du genre *Macronectes* Richmond, 1905) est fondé en fait sur une description de la seconde de ces deux espèces. Il est proposé de désigner un néotype pour *giganteus*.

1. The genus *Macronectes* Richmond, 1905 was thought, until relatively recently, to include only one species, *Procellaria gigantea* Gmelin, [1789] (p. 563), the giant petrel of southern oceans. Bourne & Warham (1966) showed that two sibling species were involved, which they called *M. giganteus* and *M. halli* Mathews, 1912 (p. 187; described as *M. giganteus halli*). One of us (Voisin, 1968) later confirmed these findings. Bourne & Warham (1966, p. 64) designated specimen no. 91.6.16.6 in the collections (now at Tring) of the Natural History Museum, London as 'the Type' of *M. halli*. The specimen, taken from the Kerguelen Islands in 1840 by the Antarctic Expedition under Sir James Clarke Ross, is one of those studied by Mathews and is to be regarded as the lectotype.

2. Various morphological and biological characteristics of the two species have been studied by a number of authors (see, for example, Bourne & Warham, 1966; Voisin, 1968, 1976, 1982, 1988; Johnstone, 1971, 1974; Voisin & Bester, 1981; Hunter, 1983, 1987). The two species have very similar measurements in the localities where they co-exist, which does not permit their separation. Their plumages become progressively lighter with age and show significant differences in old birds only. The southern species, *giganteus*, is polymorphic, with a grey, white-headed dark form and a white form. The birds of the more northerly species, *halli*, are darker, browner and have lighter underparts, and have no white form. The most obvious morphological difference is the

colour of the bill, which is green or green-tipped in *giganteus* and reddish-brown in *halli*. Unfortunately, this character, which is apparent even in fledglings, fades rapidly after death and disappears completely in specimens which have been kept in fluids or in poor conditions, which was often the case in the early days of ornithology.

3. The nominal species *Procellaria gigantea* was proposed by Gmelin ([1789]), who summarised the description given by Latham (1785, pp. 396–397, pl. 100) and latinized the latter's vernacular 'giant petrel'. Gmelin was the first to publish the name, which had been used in manuscripts for some time; he may never have seen a specimen. The birds described by Latham are supposed to have been taken off Staten Island (Isla de los Estados, Argentina) during Cook's first voyage, 1768–1771 (see Mathews, 1912, pp. 181, 186; Bourne & Warham, 1966). They have disappeared from the Natural History Museum, London, if they ever reached it. Mathews (1912, p. 2) noted 'whatever became of the birds cannot now be definitely ascertained, but apparently none of the specimens met with on the first voyage came into the possession of the British Museum'. There are today only illustrations made by S. Parkinson, the artist on Cook's first voyage, of two specimens of these giant petrels, nos. 17 (an unsigned pencil sketch) and 18 (an unsigned painting) in the Museum in London (Banks collection), but neither can be determined to species (Voisin, 1981). Mathews (1912, pp. 181–182) reproduced the unpublished descriptions by Solander of these two illustrations.

4. Latham's (1785) description does not correspond with these illustrations, nor with Solander's descriptions which Latham seems to have ignored. Latham's and Gmelin's descriptions, and Latham's accompanying figure, were based on mature birds and clearly relate to the species now called *M. halli*. In his description of the birds Latham noted that 'Captain Cook met with them in vast numbers in Christmas Harbour, Kerguelen's Land (Cook's Last Voy., i, p. 87; ii, p. 205)', where *halli* is very common and *giganteus* extremely rare (see Thomas, 1983, p. 137; Weimerskirch, Zotier & Jouventin, 1989; Voisin, pers. obs.). Mathews (1912, pp. 183, 187) considered that Latham's description did not apply to the Kerguelen breeding bird but it now seems highly probable that Latham based his description on observations, pictures and even specimens of *halli* retrieved from the Kerguelen Islands on Cook's last voyage, 1776–1780 (see Godman, 1909, p. 262). Mathews (pp. 2, 3) noted that the specimens and drawings collected on this last voyage passed into the Banks collection where they were studied by Latham. A painting of a giant petrel (no. 39 in the Banks collection) made on the Kerguelen Islands by W. Ellis, one of the artists on Cook's third voyage, is unfortunately unidentifiable to species (see Mathews, 1912, pp. 2, 183; Lysaght, 1959, p. 328).

5. Recognition that the name *gigantea* Gmelin, [1789], based on Latham's (1785) description, relates to the northern giant petrel means that this is the valid name for the species currently called *Macronectes halli* Mathews, 1912, and the southern species, currently called *gigantea*, requires a new name. *Procellaria ossifraga* Forster, 1844 (p. 343) is a junior synonym of Gmelin's name but there is no type material and it is not possible to determine its specific identity from the published description; the name has not been used since its original publication. The transfer of the name *gigantea* to the species currently called *halli* is very undesirable and would cause great confusion. Since 1966 all authors have used the names *gigantea* and *halli* as Bourne & Warham defined them, in both taxonomic and ecological works (see, for example, Marchant & Higgins, 1990, pp. 356–376; Sibley & Monroe, 1990, pp. 320, 321; Warham, 1990; a list

of a further 50 works demonstrating usage of the names is held by the Commission Secretariat). *Procellaria gigantea* is the type species by monotypy of the genus *Macronectes* Richmond, 1905 (p. 76; a replacement name for the invalid *Ossifraga* Hombron & Jacquinot, 1844 (p. 357), a junior homonym of the raptor name *Ossifraga* Wood, 1835).

6. We propose that nomenclatural stability should be maintained by designating a neotype for *Macronectes giganteus* in its universally accepted sense following Bourne & Warham (1966). We therefore designate specimen no. 1911 340 in the Catalogue Général of the Laboratoire de Zoologie: Mammifères et Oiseaux, Muséum National d'Histoire Naturelle, Paris as the neotype. It is a specimen collected at Admiralty Bay, King George Island, South Shetlands, not far from a breeding colony (Gain, 1913). No subspecies of *M. giganteus* has been described from this locality and *M. halli* does not nest there. The specimen is an adult male with the dark underparts and white head characteristic of *M. giganteus*. It bears two white labels noting (1) 'Mission Antarctique Française 1908–1910, no. 914, voyag. date 30.12.1909' and (2) morphological details, and a red label noting '*Procellaria gigantea* Gmelin, [1789] neotype, C.G. 1911 no. 340'.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to designate specimen no. 1911 340 in the Muséum National d'Histoire Naturelle, Paris, for which the data are given in para. 6 above, as the neotype for the nominal species *Procellaria gigantea* Gmelin, [1789];
- (2) to place on the Official List of Generic Names in Zoology the name *Macronectes* Richmond, 1905 (gender: masculine), type species by monotypy *Procellaria gigantea* Gmelin, [1789];
- (3) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *gigantea* Gmelin, [1789], as published in the binomen *Procellaria gigantea* (specific name of the type species of *Macronectes* Richmond, 1905) and as defined by the neotype designated in (1) above;
 - (b) *halli* Mathews, 1912, as published in the trinomen *Macronectes giganteus halli* and as defined by the lectotype designated by Bourne & Warham (1966).

References

- Bourne, W.R.P. & Warham, J. 1966. Geographical variation in the giant petrels of the genus *Macronectes*. *Ardea*, **54**(1–2): 45–67.
- Forster, J.R. 1844. *Procellaria ossifraga*. Pp. 343–344 in Lichtenstein, H. (Ed.), *Descriptiones animalium quae itinere ad maris australis terras per annos 1772 1773 et 1774 suscepto collegit observavit et delineavit Ioannes Reinaldus Forster*. Academica, Berolini.
- Gain, L. 1913. *Oiseaux antarctiques. Deuxième Expedition Antarctique Française (1908–1910)*. 200 pp., 15 pl. Sciences Naturelles, Documents Scientifiques, Paris.
- Gmelin, J.F. [1789]. *Caroli a Linné Systema Naturae*, Ed. 13, vol. 1, part 2 (Aves). Pp. 233–1032. Lugduni.
- Godman, F. du Cane. 1909. *A monograph of the petrels (Order Tubinares)*, part 4. Pp. 233–296, pls. 67–84. Witherby, London.
- Hombron, J.B. & Jacquinot, C.H. 1844. Remarques sur quelques points de l'anatomie et de la physiologie des Procellariidées, et essai d'une nouvelle classification de ces oiseaux. *Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences*, **18**: 353–358.

- Hunter, S. 1983. Identification of giant petrels *Macronectes* spp. *Sea Swallow*, **32**: 72–76.
- Hunter, S. 1987. Species and sexual isolating mechanisms in sibling species of giant petrels *Macronectes*. *Polar Biology*, **7**: 295–301.
- Johnstone, G.W. 1971. Birds in the hand. Giant petrels. *Australian Bird Bander*, **9**: 83–84.
- Johnstone, G.W. 1974. Field characters and behaviour at sea of giant petrels in relation to their oceanic distribution. *Emu*, **74**: 209–218.
- Latham, J. 1785. *A general synopsis of birds*, vol. 3, part 2. Pp. 329–628, pls. 96–106. Leigh & Sotheby, London.
- Lysaght, A. 1959. Some eighteenth century bird paintings in the library of Sir Joseph Banks (1743–1820). *Bulletin of the British Museum (Natural History)*, Historical Series, **1**(6): 251–371.
- Marchant, S.M. & Higgins, P.J. (Eds.). 1990. *Handbook of Australian, New Zealand and Antarctic birds*, vol. 1, part A (Ratites to ducks). 735 pp. Oxford University Press, Melbourne.
- Mathews, G.M. 1912. *The birds of Australia*, vol. 2. Part 1, pp. 1–120, pls. 68–81; part 2, pp. 121–236, pls. 82–94. Witherby, London.
- Richmond, C.W. 1905. New generic name for the Giant Fulmar. *Proceedings of the Biological Society of Washington*, **18**: 76.
- Sibley, C.G. & Monroe, B.L. Jr. 1990. *Distribution and taxonomy of birds of the world*. xxiv, 1111 pp. Yale University Press, New Haven & London.
- Thomas, Th. 1983. Données récentes sur l'avifaune des îles Kerguelen (Terres australes et antarctiques françaises). *L'Oiseau et la Revue Française d'Ornithologie*, **53**(2): 133–141.
- Voisin, J.-F. 1968. Les pétrels géants *Macronectes halli* et *Macronectes giganteus* de l'île de la Possession. *L'Oiseau et la Revue Française d'Ornithologie*, **38** (spécial): 95–122.
- Voisin, J.-F. 1976. Observations sur les pétrels géants de l'île aux Cochons (archipel Crozet). *Alauda*, **44**(4): 411–430.
- Voisin, J.-F. 1981. Quelle espèce Gmelin a-t-il décrite sous le nom de *Procellaria gigantea*? *Le Gerfaut*, **71**(2): 251–255.
- Voisin, J.-F. 1982. Observations on the Falkland Islands giant petrel *Macronectes giganteus solanderi*. *Le Gerfaut*, **72**(4): 367–380.
- Voisin, J.-F. 1988. Breeding biology of the northern giant petrel *Macronectes halli* and the southern giant petrel *M. giganteus* at île de la Possession, îles Crozet, 1966–1980. *Cormorant*, **16**: 65–97.
- Voisin, J.-F. & Bester, M.N. 1981. The specific status of giant petrels *Macronectes* at Gough Island. Pp. 215–222 in Cooper, J. (Ed.), *Proceedings of the symposium on the birds of the sea and shore*, 1979. African Seabird Group, Cape Town.
- Warham, J. 1990. *The petrels, their ecology and breeding systems*. viii, 440 pp. Academic Press, London.
- Weimerskirch, H., Zotier, R. & Jouventin, P. 1989. The avifauna of the Kerguelen Islands. *Emu*, **89**: 15–19.

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Comment on the citation of names in *Zoological Record* as evidence of general scientific use

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In a comment (BZN 48: 148–150) on the proposed precedence of the fish family name HOMALOPTERIDAE over BALITORIDAE, Drs P.K.L. Ng & K.K.P. Lim have discussed the usage of those names. They are apparently using (p. 149) the number of occurrences of HOMALOPTERIDAE in *Zoological Record* to support the view that this family name does not have wide scientific usage. However, because of our policy of standardizing the classification and placement of names this argument is not necessarily valid.

Classification for the *Record* consists of placing the name(s) used in an article under the appropriate *Zoological Record* controlled vocabulary heading. Wherever possible our headings are based on generally accepted published authorities, or on internal records compiled over a number of years. Thus the heading names in the *Record* might, or might not, be the classification given in the article. This policy makes information retrieval very straightforward: users have to look in only one place to find all entries for a particular name. However, the placement does not simply reflect what has been used in the literature. This matter is something which we would like to resolve for the future, but consistent retrieval is our first priority.

As a matter of interest, following revision of our controlled vocabulary for *Zoological Record* (vol. 128) we base the classification of fishes on Eschmeyer's *Catalog of the Genera of Recent Fishes* (California Academy of Sciences, 1990).

Comment on the proposal to remove the homonymy between CLAVIDAE McCrady, 1859 (Cnidaria, Hydrozoa) and CLAVINAE Casey, 1904 (Mollusca, Gastropoda) (Case 2710; see BZN 48: 192–195)

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I write to point out that there is no need to make available the name CLAVUSINAE for the gastropod subfamily previously known as CLAVINAE and more recently as DRILLIINAE; the latter name should continue in use for the group, in accordance with Article 60 of the Code.

That the name CLAVINAE Casey, 1904 cannot be used is unfortunate since modern workers have become used to it, but there can be no question about its impropriety, as explained in the application. However, the next available name, DRILLIINAE Olsson, 1964, is certainly a satisfactory alternative: it unambiguously represents the same group of species and, since Cernohorsky (1985) adopted the name, it has come into common usage (see, for example, Vaught, 1989, p. 57).

It appears that the only significant hesitation in adopting the name DRILLIINAE is contained in the statement 'although DRILLIINAE is at present considered to be a synonym of CLAVINAE, future research may prove the two groups to be biologically

and taxonomically distinct' (para. 6 of the application). This is, in fact, very unlikely. The type genera, *Clavus* Montfort, 1810 and *Drillia* Gray, 1838 (p. 28), of the two nominal subfamilies have type species (*Clavus flammulatus* Montfort, 1810 and *Drillia umbilicata* Gray, 1838 respectively) which are similar and differentiable at the generic level only. Not only are their shells alike but their radular structure is of the same type (the latter is common to all the species in this grouping as now understood). In addition, although there is little available anatomical data, in those cases where it is known there is a very similar poison gland and bulb. Thus, although future research might well demonstrate differences, there is little to suggest the likelihood of there being two significantly different groups, at least at the subfamily level. It may also be noted that in the older literature, such as H. & A. Adams (1853), the taxa concerned were often included in the one genus *Drillia*.

To make the name CLAVUSINAE available would be an artificial solution to the homonymy problem (if in fact there is a problem) and could itself be a cause of instability. I therefore oppose the application.

Additional references

Adams, H. & A. 1853. *The genera of Recent Mollusca*, vol. 1, part 3. Pp. 65–96. Van Voorst, London.

Gray, J.E. 1838. On some new species of quadrupeds and shells. *Annals of Natural History; or, Magazine of Zoology, Botany, and Geology*, 1(1): 27–30.

Comment on the proposed attribution of the specific name of *Ceratites nodosus* to Schlotheim, 1813, and the proposed designation of a lectotype (Cephalopoda, Ammonoidea)

(Case 2732; see BZN 48: 31–35, 246)

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1. Ulrich's proposal (BZN 48: 33, 34) is to attribute the specific name of *Ammonites nodosa* to Schlotheim, 1813, rather than to Bruguière, 1789, and to accept *Ammonites nodosa* Schlotheim, 1813 as the type species of *Ceratites* de Haan, 1825. I consider these proposals to be unnecessary and undesirable, particularly since the original specimen of *Ammonites nodosa* Bruguière has been discovered and proposed as lectotype. I therefore now propose to the Commission that this original specimen be confirmed as the lectotype. In the following paragraphs I spell out in some detail the history of this important case.

2. *Ammonites nodosa* Bruguière, 1789 (p. 43) is based on an illustration (pl. 39, no. 262) in an anonymous work published simultaneously in Paris and The Hague in 1742. The Paris edition is entitled *Traité des Pétrifications* and the Hague edition *Mémoires pour servir à l'Histoire Naturelle des Pétrifications dans les quatre parties du Monde*. Apart from the title pages the books are the same. The author is disguised as 'B***'. These works are attributed to Louis Bourguet (1678–1742). He interpreted the

'pétrifications' as remains of extinct organisms. After revocation of the Edict of Nantes (1685) his interpretations were probably considered heretical and it was evidently for this reason that he chose anonymity. The illustration in these books was redrawn, with acknowledgement of the source, from fig. 25 (p. 159) in Scheuchzer's *Meteorologia et Oryctographia Helvetica* (1718). Scheuchzer's illustration is reproduced by Rieber & Tozer (1986, p. 829). Although these old illustrations are not very good, the drawings and descriptions were nevertheless good enough to characterize an ammonoid species recognizable to Schlotheim (1820, p. 67), Philippi (1901, p. 409), Spath (1934, p. 477) and others mentioned below. *Ammonites nodosa* Bruguière is important because it was designated the type species of *Ceratites* de Haan, 1825 (p. 39) by Smith (1904, p. 382).

3. Until recently the whereabouts, indeed even the continued existence, of Scheuchzer's specimen was unknown. In spite of this, in the principal works that deal with *Ceratites nodosus* (e.g. Philippi, 1901, p. 409; Spath, 1934, p. 476) Scheuchzer's illustration was treated as that of the type specimen. Most later authors (e.g. Penndorf, 1951, p. 13; Wenger, 1957, p. 91), although they do not give the Scheuchzer and other pre-Linnaean references in synonymy, attribute the species to Bruguière without any qualification. Philippi (1901) adopted a style in which the species was listed as '*Ceratites nodosus* (Brug.) Schloth. sp.'. Philippi's nomenclature, which was adopted by Riedel (1916, p. 46) and Schmidt (1928, p. 303), was criticised and rejected by Spath (1934, p. 477). Similarly criticised as being without legal foundation was the unqualified attribution of the species to Schlotheim by Schrammen (1928, p. 41).

4. In 1985 Hans Rieber and I (Rieber & Tozer, 1986) found Scheuchzer's illustrated specimen in the Paläontologisches Museum of the University of Zurich, where it has the registration number PIMUZ L/1651). Also in the Museum collection are the two other specimens described by Scheuchzer (L/1650, L/1652). They do not resemble Scheuchzer's illustration which formed the basis of *Ammonites nodosa* Bruguière, and were illustrated for the first time by Rieber & Tozer (1986, p. 832). They had never been considered in discussions of the definition of *Ammonites nodosa*. Rieber & Tozer (p. 831) proposed L/1651 as lectotype of *Ammonites nodosa*, recognizing that a Commission ruling might be required. It was proposed as a lectotype rather than holotype because of the existence of the two other specimens, even though Bruguière used only the one illustrated specimen. Shortly after publication of this proposal of a lectotype for *Ammonites nodosa* Bruguière, opposition was expressed by Urlichs & Mundlos (1987). They proposed suppression of *Ammonites nodosa* Bruguière and introduced a nominal taxon called '*Ceratites nodosus* (Schlotheim)', which they gave as the type species of *Ceratites* de Haan as having been so designated by Hyatt & Smith (1905, p. 168). As now recognized by Urlichs (BZN 48: 32, para. 7), the first designation was in Smith (1904, p. 382), but in both works the species was attributed to Bruguière and not Schlotheim. Urlichs seeks Commission sanction for these procedures.

5. Schlotheim's role in this question must be considered. He described and illustrated *Ammonites nodosus* (1820, p. 67; 1823, p. 106, pl. 31, figs. 1a, b). This is the only illustration of *Ammonites nodosus* in Schlotheim's work. Philippi (1901, p. 65) regarded Schlotheim's figure as representative of *Ceratites nodosus*. This specimen has now been found in the Museum für Naturkunde, Berlin by Urlichs & Mundlos (1987, p. 22) where it is registered MB: C774. Urlichs & Mundlos do not accept Schlotheim's or Philippi's identifications; instead they name MB: C774 as a representative of *Ceratites* (*Acanthoceratites*) *spinosus spinosus* Philippi. It should be noted that Schlotheim (1820,

p. 67) gives a form of synonymy which refers to the illustrations in Scheuchzer and the works of B***. Although he does not explicitly attribute *Ammonites nodosus* to Bruguière, he clearly considered that he was dealing with Bruguière's species and not a new one.

6. Spath (1934, p. 477) agreed with the Schlotheim and Philippi identification of MB: C774 but, believing that neither Scheuchzer's nor Schlotheim's originals could be traced, decided that 'the specimen figured by Philippi (1901, pl. 46, figs. 1, 1a, b) may be considered to be the neotype'. This may be called Philippi's specimen, which Spath evidently did not attempt to trace. Urlichs & Mundlos have discovered that it was destroyed by fire in Strasbourg; however, a cast is preserved in the Museum für Naturkunde, Berlin (Urlichs & Mundlos, 1987, p. 10). Puzzling and seemingly inconsistent is Urlichs's (BZN 48: 32, para. 6) statement about the Philippi specimen: '... Philippi (1901, p. 413, pl. 46, fig. 1) described and figured as *Ceratites nodosus* a specimen very similar in dimension and sculpture to Schlotheim's figure of *Ammonites nodosus*. This specimen, however, differs from Schlotheim's (1823) *Ceratites nodosus*'. It is stressed that Schlotheim figured only one specimen of *Ammonites nodosus*, which is the specimen identified by Urlichs & Mundlos (1987) as *Ceratites (Acanthoceratites) spinosus spinosus*. Yet in the quoted passage it seems that Schlotheim's figure is accepted as an example of '*Ammonites nodosus*'. The meaning of 'Schlotheim's (1823) *Ceratites nodosus*' is not clear. No explicit reference is given, it seems that there is no figure; also, the genus *Ceratites* had not been proposed in 1823.

7. There are three specimens that bear on the interpretation of *Ammonites nodosa* Bruguière:

1. Scheuchzer's specimen (PIMUZ L/1651), the original for *Ammonites nodosa* Bruguière.
2. Schlotheim's specimen (MB: C774), the original for *Ammonites nodosus* (Schlotheim, 1823, pl. 31, figs. 1a, b).
3. Philippi's specimen (1901, pl. 46, fig. 1), which was destroyed but of which there is a cast in the Museum für Naturkunde, Berlin (Urlichs & Mundlos, 1987, p. 10). This was 'considered to be the neotype' of *Ceratites nodosus* (Bruguière) by Spath (1934, p. 477).

Urlichs & Mundlos (1987, p. 4) dismiss Nos. 1 and 2 as not being representative '*Ceratites (Ceratites) nodosus* (Schlotheim)'. No. 3 they consider representative but unsuitable, having been destroyed. Instead they propose to recognize as lectotype for '*Ammonites nodosus* Schlotheim' a specimen designated MB: C785 in the Museum für Naturkunde. This specimen is said to be from the Schlotheim collection but it was not illustrated by Schlotheim or anybody else and was not explicitly mentioned in the literature prior to its description by Urlichs & Mundlos (1987). The purpose of Urlichs's application is 'to conserve the name of the Triassic ammonite *Ceratites nodosus* (Schlotheim, 1813) in its current usage...'. In this case, 'current usage' can only be defined as usage advocated by Urlichs & Mundlos (1987). Schlotheim, Philippi, Spath and Wenger, over a period of more than a century, regarded ammonites resembling Scheuchzer's illustration as representative of *Ammonites nodosa* Bruguière. Of the three specimens mentioned above, Urlichs & Mundlos (1987, p. 5) consider that only the Philippi specimen conforms to *Ceratites nodosus* in 'current usage'. They identify Scheuchzer's specimen (L/1651) as '*Ceratites (Doloceratites) robustus robustus* Philippi' (Urlichs & Mundlos, 1987, p. 29). The author of *Ceratites robustus* is in fact Riedel (1916,

p. 28) as stated in para. 9 of Urlichs's application. The only specimen of *Ammonites nodosus* illustrated by Schlotheim they identify as *Ceratites (Acanthoceratites) spinosus spinosus* Philippi.

8. The taxonomy adopted by Urlichs & Mundlos (1987) for the ceratitids of the Upper Muschelkalk is different from that of Schlotheim, Philippi, Spath and Wenger. It is much more elaborate, with recognition of genera, subgenera, species and sub-species. Their taxonomy is unarguably subjective but it is this taxonomy that Urlichs regards as 'current usage'. Urlichs's proposals to the Commission are framed to accommodate his own subjective interpretations and are contrary to the Code.

9. I propose that Scheuchzer's specimen (PIMUZ L/1651), the original for *Ammonites nodosa* Bruguière, 1789, be recognized as the lectotype of that taxon in accordance with the Code. The specimen is well preserved and has recently been illustrated (Rieber & Tozer, 1986, p. 829; Urlichs & Mundlos, 1987, p. 29). Spath (1934) proposed a neotype for this taxon, although Urlichs (BZN 48: 33) does not accept his designation as valid. Even so, it is desirable that the Commission should rule on this matter in accordance with Article 75h of the Code (Status of rediscovered name-bearing types). Acceptance of my proposal would make it unnecessary to revise the definition of *Ceratites (Ceratites)*. The definition of *Ceratites* proposed by Urlichs & Mundlos restricts it to conform with the classification they advocate and Urlichs's proposals to the Commission are designed to legalize the taxonomy in Urlichs & Mundlos (1987). These proposals have been made to ensure that the definition of *Ceratites* is changed to what Urlichs wants it to be, as opposed to what it was originally and unambiguously defined to be. Urlichs's proposal cannot be supported and I make a counter proposal.

10. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to suppress the neotype designation made by Spath (1934) of the specimen figured by Philippi (1901, pl. 46, fig. 1) for *Ceratites nodosus* Bruguière, 1789 and any other neotype designation;
- (2) to confirm the lectotype designation by Rieber & Tozer (1986) of specimen PIMUZ L/1651 in the Paläontologisches Museum, University of Zurich, for *Ammonites nodosa* Bruguière, 1789;
- (3) to confirm the type species designation for *Ceratites* de Haan, 1825 by Smith (1904) of *Ammonites nodosa* Bruguière, 1789;
- (4) to place on the Official List of Generic Names in Zoology the name *Ceratites* de Haan, 1825 (gender: masculine), type species by designation by Smith (1904) as confirmed in (3) above *Ammonites nodosus* Bruguière, 1789;
- (5) to place on the Official List of Specific Names in Zoology the name *nodosa* Bruguière, 1789, as published in the binomen *Ammonites nodosa* (specific name of the type species of *Ceratites* de Haan, 1825) and as defined by the lectotype PIMUZ L/1651 designated by Rieber & Tozer (1986).

Additional references

- Hyatt, A. & Smith, J.P. 1905. The Triassic cephalopod genera of America. *United States Geological Survey, Professional Papers*, 40: 1-214.

- Penndorf, H. 1951. Die Ceratiten-Schichten am Meissner in Niederhessen. *Abhandlungen der Senckenbergischen Naturforschenden Gesellschaft*, **484**: 1–24.
- Schmidt, M. 1928. *Die Lebewelt unserer Trias*. 461 pp. Öhringen.
- Schrammen, A. 1928. Die Lösung des Ceratitenproblems. *Zeitschrift der deutschen geologischen Gesellschaft*, **80**: 26–42.
- Wenger, R. 1957. Die Germanischen Ceratiten. *Palaeontographica* (A), **108**: 57–129.

Comments on the proposed conservation of some generic names first proposed in *Histoire abrégée des insectes qui se trouvent aux environs de Paris* (Geoffroy, 1762)
(Case 2292; see BZN **48**: 107–134; **49**: 71–72)

(1) Frank-Thorsten Krell

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Before I became aware of Dr Kerzhner's proposals I had prepared an application for the conservation of *Melolontha* Fabricius, 1775, and I fully support his suggestions on BZN **48**: 121 (para. K.18). As said by Pope (BZN **49**: 71), it is unacceptable to give the authorship 'Müller [or Geoffroy in Müller], 1764' to names such as *Melolontha* regardless of their taxonomic sense.

After Fourcroy (1785) the name *Melolontha* was not used in Geoffroy's sense (i.e. in the CHRYSOMELIDAE) until Crotch (1870) and Des Gozis (1886, p. 33). The latter used *Melolontha* Geoffroy as the valid senior synonym of *Clytra* Laicharting, 1781, and proposed the new generic name *Ludibrius* instead of *Melolontha* Fabricius for the May beetle *Scarabaeus melolontha* Linnaeus, 1758. Only Bedel followed the restoration of *Melolontha* Geoffroy, although in 1911 (p. 379) he abandoned *Ludibrius* for *Hoplosternus*, an unjustified emendation of *Oplosternus*, published by Guérin-Méneville (1838, p. 63) for the scarabaeid *Melolontha* (*Oplosternus*) *chinensis*. The generic name *Melolontha* Fabricius, 1775 for the May beetle *M. melolontha* is one of the commonest names in pure and applied entomology; Dalla Torre (1912) gave more than 13 pages of references.

I am well acquainted with Lamellicornia names, and on the grounds of their common usage I support the conservation of *Copris* Geoffroy, 1762 (Kerzhner's para. K.9) and *Platycerus* Geoffroy, 1762 (para. K.23). I also agree with Kerzhner (para. A.4) that Geoffroy in Fourcroy is the correct authorship of the new specific names introduced in Fourcroy's 1785 *Entomologia Parisiensis*, as is pointed out by d'Aguilar & Raimbault (1990).

Considering their usage the necessity to maintain many of Geoffroy's names is apparent. Their conservation with the authorship Geoffroy, 1762 as proposed by Kerzhner is a highly stabilizing act which will avoid any future confusion about many common generic names.

Additional references

- Aguilar, J.d' & Raimbault, F. 1990. Notes de bibliographie entomologique. 3. Geoffroy, Fourcroy et l'Article 51 du Code de Nomenclature. *Entomologiste*, **46**: 37–40.
- Bedel, L. 1911. Synonymies de *Scarabaeidae* paléarctiques (Col.). *Bulletin de la Société Entomologique de France*, **1911**: 377–381.

- Dalla Torre, K.W. von.** 1912. Scarabaeidae: Melolonthinae III. *Coleopterorum Catalogus*, **20**: 135–290 (= pars 49).
- Des Gozis, M.** 1886. *Recherche de l'espèce typique de quelques anciens genres. Rectifications synonymiques et notes diverses*. 36 pp. Herbin, Montluçon.
- Guérin-Méneville, F.E.** 1838. Insectes du voyage de la Favorite. [80 pp., pls. 225–238]. *Magasin de Zoologie*, **8**, (Classe ix, Insectes).

(2) S.J. Brooks

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I agree with Kerzhner's proposal on BZN **48**: 114–115 (para. G.1) to suppress *Formicaleo* and thus retain *Euroleon* Esben-Petersen, 1918 as the valid generic name for the ant-lion species *nostras* Geoffroy in Fourcroy, 1785. Prior to Leraut's (1980) resurrection of *Formicaleo* it had not been in general usage for over 50 years. Even now the name has not been widely adopted by neuropterists, and it is not used in standard works on the MYRMELEONIDAE. On the other hand, *Euroleon* is well established in the literature.

Kerzhner's point about possible confusion between *Formicaleo* and *Formicaleon* Banks, 1911 is also valid. *Formicaleon* is a well-known myrmeleonid genus and has been widely used in the past, although at present it is treated as a junior subjective synonym of the large and important genus *Distoleon* Banks, 1910, a point not referred to by Kerzhner.

Comment on the proposed conservation of the neotype designation for *Paladin eichwaldi* (Fischer von Waldheim in Eichwald, 1825) (Trilobita)

(Case 2778; see BZN **48**: 203–205)

H.B. Whittington

Sedgwick Museum, Department of Earth Sciences, University of Cambridge, Downing Street, Cambridge CB2 3EQ, U.K.

I support this proposal to stabilize the current usage of Fischer von Waldheim's specific name *eichwaldi*, as defined by Osmólska's neotype in St Petersburg.

Comments on the proposed conservation of *Ptychagnostus* Jaekel, 1909 and *Glyptagnostus* Whitehouse, 1936 (Trilobita)

(Case 2805; see BZN **48**: 200–202)

(1) A.W.A. Rushton

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I wish to express my support for the proposal to conserve the names of the trilobite genera *Ptychagnostus* and *Glyptagnostus* with their accepted usage. Both of these genera, as currently understood, include species that are of great value in the inter-continental correlation of Cambrian rocks; their names are widely used in zonal

tabulations and correlation charts. Stabilisation of their names will thus benefit stratigraphers, as well as palaeontologists, world-wide.

(2) H.B. Whittington

Sedgwick Museum, Department of Earth Sciences, University of Cambridge, Downing Street, Cambridge CB2 3EQ, U.K.

I strongly support this application, which will settle a long-standing difficulty and conserve accepted usage.

Comment on the proposed conservation of the specific name of *Amphiuma tridactylum* Cuvier, 1827 (Amphibia, Caudata)

(Case 2771; see BZN 48: 238–239; 49: 73)

Hobart M. Smith

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I should like to expand my previous brief note of support (BZN 49: 73) for Dr Dundee's application. Every case in which the 'nomen oblitum' concept arises, now embodied in Article 79 of the Code, requires a judicious consideration of the relative merits of priority and stability. This particular case is not borderline, however. Salthe's (1973) synopsis for *Amphiuma tridactylum* Cuvier, 1827 cites 63 works of sufficient scientific importance to note, and dozens more in the popular literature must have used the name. Undoubtedly the name has appeared in many other works published after Salthe's account. Since the specific name *quadrupeda* has never been used as valid since it was proposed by Custis (1807), application of the principle of priority in this case would be a flagrant disservice to nomenclatural stability and should not be permitted.

Note on the proposed designation of a neotype for *Hyla chrysoscelis* Cope, 1880, and the designation of a neotype for *H. versicolor* Le Conte, 1825 (Amphibia, Anura)

(Case 2366; see BZN 40: 165–166; 45: 138–140)

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In 1983 we made a proposal (BZN 40: 165–166) to deal with the taxonomic and nomenclatural problems arising from the existence of two morphologically similar

treefrogs in the eastern United States. One of these is diploid, and has always been known as *Hyla chrysoscelis* Cope, 1880 since its differentiation from *H. versicolor* Le Conte, 1825 (which is tetraploid) by F.C. Johnson and his (mistaken) use in 1961 of the name *chrysoscelis*. Very unfortunately the holotype of Cope's nominal species is a specimen of *H. versicolor*, a fact unknown to Johnson. We proposed as neotype of *chrysoscelis* the holotype of *H. versicolor sandersi* Smith & Brown, 1947, an unused synonym of *chrysoscelis* sensu Johnson. The *chrysoscelis/versicolor* species pair has become a much studied case of polyploidy in animals, and it is important that the two names should not be confused.

In September 1985 the Commission approved our proposals by a majority of 20 : 3. However, objection was made to the attribution of the authorship 'Cope, 1880' to the name of a taxon different from that described by Cope. Because of this and other questions we published a second application (BZN 45: 138–140) proposing that the name *Hyla chrysoscelis* (with the same neotype) be taken from Johnson, 1961, where it was first used in the current sense.

In March 1990 Commissioners were asked to choose between our original (BZN 40: 166) and revised (BZN 45: 139) proposals, and they approved the former by a majority of 17 : 8. However, it was pointed out that the ploidy of the proposed *chrysoscelis* neotype (the holotype of *sandersi*) had not been mentioned. It has proved technically not possible to determine this, and we now designate a specimen of *H. chrysoscelis* (in the modern sense) as the neotype of Cope's nominal species, subject to a Commission vote (which will not involve further use of the plenary powers) of acceptance of a change in proposal (1)(b) on BZN 40: 166.

The proposed neotype is Texas Natural History Collection (University of Texas at Austin) no. 37293. It is an adult male, 38 mm s-v, from 2 miles west of the Colorado River on Highway 969, Bastrop County, Texas. It was collected in April 1970 by J.P. and J.E. Bogart, and bears J.P. Bogart's field no. 2043. It belongs to the 'fast-calling' taxon (cf. Johnson, 1961) and is diploid (J.P. Bogart, personal communication); the karyotype conforms with the report by Ralin (1977, pp. 722–733, 'locality 2').

As reported by Duellmann (1977, p. 109) no type specimen exists of *H. versicolor* Le Conte, 1825. Because of the need to distinguish the species from *H. chrysoscelis* we here designate as neotype American Museum of Natural History specimen no. 84483. It is an adult male, 50 mm s-v, from Alpine, Bergen County, New Jersey (original type locality 'northern states'). It is tetraploid (karyotype filed as AMNH K207), belongs to the 'slow-calling' taxon, and was collected April 13, 1970 by Richard G. Zweifel. The Commission voted in 1990 to place *versicolor* on the Official List of Specific Names.

Acknowledgements

We are much indebted to Drs James P. Bogart (*University of Guelph*), Charles W. Myers and Margaret G. Arnold (*American Museum of Natural History*), David G. Cannatella (*Texas Memorial Museum*) and Roy W. McDiarmid (*U.S. National Museum*) for the loan of specimens and for their counsel.

References

- Duellmann, W.E. 1977. Liste der rezenten Amphibien und Reptilien. Hylidae, Centrolenidae, Pseudidae. *Das Tierreich*, 95: i–xix, 1–225.

Ralin, D.B. 1977. Evolutionary aspects of mating call variation species complex of treefrogs (Anura). *Evolution*, **31**: 721–736.

Note on the proposed conservation of the names *Epicrium* Wagler, 1828 and ICHTHYOPHIIDAE Taylor, 1968 (Amphibia, Gymnophiona), and on the conservation of EPICRIIDAE Berlese, 1885 (Arachnida, Acari)

(Case 2616 and Opinion 1604; see BZN **45**: 207–209; **46**: 134; **47**: 166–167; **48**: 152–155, 335–336)

P.K. Tubbs

Executive Secretary, International Commission on Zoological Nomenclature

1. In Opinion 1604 (June 1990; BZN **47**: 166–167) the caecilian generic name *Epicrium* Wagler, 1828 was suppressed in order that the derived family-group name EPICRIIDAE Fitzinger, 1843 should not stand as a senior synonym of the widely accepted ICHTHYOPHIIDAE Taylor, 1968. However, Prof Alain Dubois (*Muséum National d'Histoire Naturelle, Paris*) subsequently pointed out (BZN **48**: 152–154) that *Epicrium* was a valid genus with its own type species, and not, as had been supposed, a replacement name for *Ichthyophis* Fitzinger, 1826. I accordingly proposed (BZN **48**: 154–155) that the suppression of *Epicrium* should be revoked, and that ICHTHYOPHIIDAE be given precedence over EPICRIIDAE Fitzinger. The latter proposal reflects the views expressed by Wilkinson & Nussbaum (BZN **45**: 207–209) and Smith (BZN **46**: 134) but not by Dubois (BZN **48**: 153–154); however, Prof Dubois has since suggested that EPICRIIDAE Fitzinger should be rejected because it is a junior homonym (see below).

2. Dr P.T. Lehtinen and Prof R. Schuster mentioned (BZN **47**: 166) that the name EPICRIIDAE Berlese, 1855 (p. 129) is in use for a family of mesostigmatid mites, and is a junior homonym of the unused EPICRIIDAE Fitzinger, 1843. The type genus of the mite family is *Epicrius* Canestrini & Fanzago, 1877 (p. 131); this was proposed for the species *E. geometricus*, which is a subjective synonym of *Gamasus mollis* Kramer, 1876 (p. 82). Prof Dubois (in litt., November 1991) has given a list (prepared by Dr Michel Naudo of the *Laboratoire de Zoologie (Arthropodes), Muséum national d'Histoire naturelle, Paris*) of 20 references using EPICRIIDAE Berlese at family or superfamily rank; these include André (1949), Baker & Wharton (1968), Krantz (1970), Trägårdh (1942) and Woolley (1988). It is evident that this family name should be conserved, and the simplest way of doing this is to take the whole name of *Epicrium* as the stem so that Fitzinger's amphibian name would become EPICRIUMIDAE; it is unlikely to be used at family rank, as pointed out by Smith (BZN **48**: 336). The spelling in proposals (1)(b) and (4)(b) on BZN **48**: 155 should be amended accordingly.

3. Two further points remain. The first concerns the type species of *Epicrium* Wagler, 1828. As I reported on BZN **48**: 154, Wagler originally published two specific names in association with *Epicrium*, i.e. *hypocyana* 'Hasselt' (with a reference given to Boie, 1827) and his new name *hasseltii*, and made it clear that these were for the same species, based on van Hasselt's specimen. No reason was given for the proposal of *hasseltii*. Strictly speaking, *Epicrium* thus contained one taxonomic but two nominal species, the names of which are objective synonyms. On BZN **48**: 153 (para. 3) Prof

Dubois gave *E. hasseltii* as the type by monotypy, while on p. 155 I stated the same for *Caecilia hypocyana* Boie, 1827. The latter is the valid name, and I now propose that *C. hypocyana* be designated the type species.

4. The second point concerns the spelling of ICHTHYOPHIDAE Taylor, 1968. It has always been spelled in this way, and was so placed on the Official List in Opinion 1604. On BZN 48: 335–336 Prof H.M. Smith suggested that the correct spelling should be ICHTHYOPHEIDAE, since in Attic (Athenian) Greek the genitive of *ophis* (= snake) was *opheos*. Cannatella (1990) pointed out, however, that in other major dialects (e.g. Doric and Ionic) of Greek the genitive *ophios* was used, and that the Code (Article 11b(iv) and Glossary) does not distinguish between dialects of 'ancient Greek'. There are many family-group names spelled -OPHIDAE which are based on generic ones ending in *-ophis*, and it would be very destabilizing to change them (with varying degrees of acceptance in the literature) to the form -OPHEIDAE.

5. In addition to the proposals on BZN 48: 155 the International Commission on Zoological Nomenclature is asked:

- (1) to use its plenary powers to rule that for the purposes of Article 29 the stem of the generic name *Epicrium* Wagler, 1828 is EPICRIUM-;
- (2) to designate *Caecilia hypocyana* Boie, 1827 as the type species of *Epicrium* Wagler, 1828;
- (3) to amend the proposals on BZN 48: 155 to conform with those above;
- (4) to place on the Official List of Generic Names in Zoology the name *Epicrius* Canestrini & Fanzago, 1877 (gender: masculine), type species by monotypy *Epicrius geometricus* Canestrini & Fanzago, 1877 (a junior subjective synonym of *Gamasus mollis* Kramer, 1876);
- (5) to place on the Official List of Specific Names in Zoology the name *mollis* Kramer, 1876, as published in the binomen *Gamasus mollis* (senior subjective synonym of *Epicrius geometricus* Canestrini & Fanzago, 1877, the type species of *Epicrius* Canestrini & Fanzago, 1877);
- (6) to place on the Official List of Family-Group Names in Zoology the name EPICRIIDAE Berlese, 1885 (type genus *Epicrius* Canestrini & Fanzago, 1877);
- (7) to confirm that the original spelling of ICHTHYOPHIDAE Taylor, 1968 is correct.

Additional references

- André, M. 1949. Ordre des Acariens (Acari, Nitzsch, 1818). Pp. 794–892 in Grassé, P.-P. (Ed.), *Traité de zoologie*, vol. 6. 979 pp. Masson, Paris.
- Baker, E.W. & Wharton, G.W. 1968. *An introduction to acarology*. 465 pp. Macmillan, New York.
- Berlese, A. 1885. Acarorum systematis specimen. *Bullettino della Società Entomologica Italiana*, 17: 121–135.
- Canestrini, G. & Fanzago, F. 1877. Intorno agli Acari italiani. *Atti del Reale Istituto Veneto di Scienze, Lettere ed Arti*, (5)4(1): 69–208.
- Cannatella, D.C. 1990. Ancient Greek and ophidian orthography. *Journal of Herpetology*, 24(3): 322–323.
- Kramer, P. 1876. Zur Naturgeschichte einiger Gattungen aus der Familie der Gamasiden. *Archiv für Naturgeschichte*, 1876(1): 46–105.
- Krantz, G.W. 1970. *A manual of acarology*. 335 pp. Oregon State University, Corvallis.
- Trägårdh, I. 1942. Zur Kenntnis der Gattung *Epicrius* Berlese (Acarina). *Arkiv för Zoologi*, 34A(4): 1–10.
- Woolley, T.A. 1988. *Acarology. Mites and human welfare*. 484 pp. Wiley, New York.

Comments on the proposed designation of a neotype for *Anniella pulchra* Gray, 1852 (Reptilia, Squamata)
(Case 2552; see BZN 48: 316–318)

(1) Royce E. Ballinger

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I write in favor of the application by Drs Murphy & Smith and their solution to a major problem in the nomenclature of *Anniella*. Theirs is, indeed, a very parsimonious and practical solution. Before Hunt (1983) called attention to the problem caused by the wrong application of a name to a specimen the treatment of *A. pulchra* in the literature was as outlined by Murphy & Smith (para. 5 of the application). To 'flip-flop' the literature as required by Hunt's discovery would bring unnecessary instability and uncertainty not only to systematists but also to ecologists and other biologists.

Recently I have been working on a summary of the biology of North American lizards. My chapter on *Anniella* is complicated by the name-change confusion, a problem that will require many years to overcome unless the simple solution offered by Murphy & Smith is adopted. I urge the Commission to rule in favor of their proposal; it is both a reasonable and appropriate solution to what will otherwise become a major obstacle in literature searches on *Anniella* in the future. Although Hunt's 1983 action may have been formally correct, to follow his course and not retrieve the situation by approving the designation of the neotype would be an error; two wrongs would not make a right.

(2) Lauren E. Brown

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I strongly support the application for the conservation of the specific name *Anniella pulchra* Gray, 1852 and the designation of a neotype. Drs Murphy and Smith have done an excellent job in presenting the case; it is well-written, timely and logically sound. The name *A. pulchra* has been in use for a very long time and it would be extremely unfortunate if the nomenclature were to be destabilized, resulting in confusion. I urge the Commission to vote in favour.

(3) Wilmer W. Tanner

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I believe that Drs Murphy and Smith are correct in their analysis of the nomenclatural problem and concur that *Anniella pulchra* Gray, 1852 should be maintained as the valid name for the species; it would be most inadvisable to recognize *A. nigra argentea* Hunt, 1983. Names that have been in the literature over long periods of time and have been cited in numerous publications should not be abandoned without exceptional reasons. In this case I found little reason for accepting Hunt's nomenclature for this unique species.

(4) Robert C. Stebbins

Museum of Vertebrate Zoology, University of California, Berkeley, California 94720, U.S.A.

I fully support the application by Drs Murphy and Smith to conserve the name *Anniella pulchra* Gray, 1852. To change this name would result in much confusion, more than is justified by a strict adherence to the Code.

(5) John B. Iverson

Department of Biology, Earlham College, Richmond, Indiana 47374, U.S.A.

I write to register my support for the application by Drs Murphy and Smith to conserve the name *Anniella pulchra* Gray, 1852. A decision in any other direction would result in chaos in the interpretation of the literature. On the other hand, a ruling in favor of their proposal would eliminate the confusion and stabilize the literature.

(6) David Chiszar

Department of Psychology, University of Colorado at Boulder, Campus Box 345, Boulder, Colorado 80309-0345, U.S.A.

I am writing to support the application by Drs Murphy and Smith to conserve the name *Anniella pulchra* Gray, 1852 in accordance with its accustomed understanding and usage. Use of the plenary powers will be necessary to designate a neotype for the taxon and, of course, the additional actions requested by the authors are needed to finalize the matter.

Failure to approve the application and, hence, the adoption of the nomenclatural arrangement proposed by Hunt (1983), would create unfortunate confusion in the literature on *Anniella*. Hopefully, this can be forestalled by the Commission.

(7) Further support for the conservation of *Anniella pulchra* Gray, 1852 and the designation of a neotype has been received from Prof Carl Gans (*Department of Biology, The University of Michigan, Ann Arbor, Michigan 48109-1048, U.S.A.*), Prof Anthony P. Russell (*Department of Biological Sciences, The University of Calgary, 2500 University Drive N.W., Calgary, Alberta, Canada T2N 1N4*) and Prof Laurie J. Vitt (*Oklahoma Museum of Natural History, The University of Oklahoma, 1335 Asp Avenue, Norman, Oklahoma 73019-0606, U.S.A.*).

OPINION 1675

Amphiporus Ehrenberg, 1831 (Nemertea): *Planaria lactiflorea* Johnston, 1828 designated as the type species

Ruling

(1) Under the plenary powers all previous designations of type species for the nominal genus *Amphiporus* Ehrenberg, 1831 are hereby set aside and *Planaria lactiflorea* Johnston, 1828 is designated as the type species.

(2) The name *Amphiporus* Ehrenberg, 1831 (gender: masculine), type species by designation under the plenary powers in (1) above *Planaria lactiflorea* Johnston, 1828, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *lactiflorea* Johnston, 1828, as published in the binomen *Planaria lactiflorea* (specific name of the type species of *Amphiporus* Ehrenberg, 1831), is hereby placed on the Official List of Specific Names in Zoology.

History of Case 2707

An application for the designation of *Planaria lactiflorea* Johnston, 1828 as the type species of *Amphiporus* Ehrenberg, 1831 was received from Prof Ray Gibson (*Liverpool Polytechnic, Liverpool, U.K.*) and Dr Frank B. Crandall (*Turkey Run Research Institute, McLean, Virginia, U.S.A.*) on 30 January 1989. After correspondence the case was published in BZN 48: 22–24 (March 1991). Notice of the case was sent to appropriate journals. No comments were received.

Decision of the Commission

On 1 December 1991 the members of the Commission were invited to vote on the proposals published in BZN 48: 23. At the close of the voting period on 1 March 1992 the votes were as follows:

Affirmative votes — 28: Bayer, Bock, Bouchet, Cocks, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative vote — 1: Cogger.

Voting for, Dupuis commented that a specimen figured in McIntosh (1873–1874; see para. 6 of the application) should be designated the neotype of *Planaria lactiflorea* Johnston, 1828. Voting against, Cogger commented that to be effective the proposal required that the type(s) of *lactiflorea* are extant and unequivocal and this was not the case.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

Amphiporus Ehrenberg, 1831, in Hemprich, P.C. & Ehrenberg, C.G. (Eds.), *Symbolae Physicae, seu icones et descriptiones Corporum Naturalium novorum... Pars Zoologica. Animalia evertebrata exclusis insectis*, p. 63.

lactiflorea, *Planaria*, Johnston, 1828, *Zoological Journal*, 3: 489.

OPINION 1676

***Lepidomenia* Kowalevsky in Brock, 1883 (Mollusca, Solenogastres):
Lepidomenia hystrix Marion & Kowalevsky in Fischer, 1885 designated
as the type species**

Ruling

(1) It is hereby confirmed that authorship of the generic name *Lepidomenia* is Kowalevsky in Brock (1883).

(2) It is hereby confirmed that authorship of the specific name *hystrix*, as published in the binomen *Lepidomenia hystrix*, is Marion & Kowalevsky in Fischer (1885).

(3) Under the plenary powers all previous fixations of type species for the nominal genus *Lepidomenia* Kowalevsky in Brock, 1883 are hereby set aside and *Lepidomenia hystrix* Marion & Kowalevsky in Fischer, 1885 is designated as the type species.

(4) The name *Lepidomenia* Kowalevsky in Brock, 1883 (gender: feminine), type species by designation under the plenary powers in (3) above *Lepidomenia hystrix* Marion & Kowalevsky in Fischer, 1885, is hereby placed on the Official List of Generic Names in Zoology.

(5) The name *hystrix* Marion & Kowalevsky in Fischer, 1885, as published in the binomen *Lepidomenia hystrix* (specific name of the type species of *Lepidomenia* Kowalevsky in Brock, 1883), is hereby placed on the Official List of Specific Names in Zoology.

History of Case 2768

An application for the designation of *Lepidomenia hystrix* Marion & Kowalevsky in Fischer, 1885 as the type species of *Lepidomenia* Kowalevsky in Brock, 1883 was received from Mr David Heppell (*National Museums of Scotland, Edinburgh, U.K.*) on 6 April 1990. After correspondence the case was published in BZN 47: 254–257 (December 1990). Notice of the case was sent to appropriate journals. No comments were received.

Decision of the Commission

On 1 December 1991 the members of the Commission were invited to vote on the proposals published in BZN 47: 256. At the close of the voting period on 1 March 1992 the votes were as follows:

Affirmative votes — 27: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Kabata, Kraus, Macpherson, Mahner, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 1: Holthuis.

Lehtinen abstained.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

hystrix, *Lepidomenia*, Marion & Kowalevsky in Fischer, 1885, *Manuel de conchyliologie et de paléontologie conchyliologique...*, p. 889.

Lepidomenia Kowalevsky in Brock, 1883, *Zoologischer Jahresbericht*, 1882(3): 29.

OPINION 1677

Haustator Montfort, 1810 (Mollusca, Gastropoda): conserved

Ruling

(1) Under the plenary powers the generic name *Aculea* Perry, 1810 is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The name *Haustator* Montfort, 1810 (gender: masculine), type species by original designation *Haustator gallicus* Montfort, 1810 (a junior subjective synonym of *Turritella imbricata* Lamarck, 1804), is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *imbricata* Lamarck, 1804, as published in the binomen *Turritella imbricata* (senior subjective synonym of *Haustator gallicus* Montfort, 1810, the type species of *Haustator* Montfort, 1810), is hereby placed on the Official List of Specific Names in Zoology.

(4) The name *Aculea* Perry, 1810, as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

History of Case 2736

An application for the conservation of *Haustator* Montfort, 1810 was received from Mr Richard E. Petit (*North Myrtle Beach, South Carolina, U.S.A.*) and M. Jacques Le Renard (*Muséum National d'Histoire Naturelle, Paris, France*) on 4 August 1989. After correspondence the case was published in *BZN* 48: 25–26 (March 1991). Notice of the case was sent to appropriate journals. No comments were received.

Decision of the Commission

On 1 December 1991 the members of the Commission were invited to vote on the proposals published in *BZN* 48: 26. At the close of the voting period on 1 March 1992 the votes were as follows:

Affirmative votes — 26: Bayer, Bock, Bouchet, Cocks, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Mahner, Martins de Souza, Minelli, Nielsen, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 2: Cogger and Macpherson.

No vote was received from Nye.

Cogger commented that there did not appear to be any justification for rejecting *Aculea*, and that he would have preferred to give the name *Haustator* precedence or to rule that the latter was published first.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

Aculea Perry, 1810, *Arcana, or the Museum of Natural History*, pl. 15.

Haustator Montfort, 1810, *Conchyliologie systématique, et classification méthodique des coquilles...*, vol. 2, p. 182.

imbricata, *Turritella*, Lamarck, 1804, *Annales du Muséum National d'Histoire Naturelle*, p. 216.

OPINION 1678

Helicarion Férussac, 1821 (Mollusca, Gastropoda): conserved, and *Helicarion cuvieri* Férussac, 1821 designated as the type species

Ruling

(1) Under the plenary powers:

- (a) the correct original spelling of the generic name *Helixarion* Férussac, 1821 is deemed to be *Helicarion*;
- (b) all designations of type species for the nominal genus *Helicarion* Férussac, 1821 prior to that by Gray (1847) of *Helicarion cuvieri* Férussac, 1821 are hereby set aside.

(2) The name *Helicarion* Férussac, 1821 (gender: masculine), type species by subsequent designation by Gray (1847) *Helicarion cuvieri* Férussac, 1821, as ruled in (1)(b) above, spelling confirmed in (1)(a) above, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *cuvieri* Férussac, 1821, as published in the binomen *Helixarion cuvieri* and as defined by the neotype designated by Kershaw (1979) (specific name of the type species of *Helicarion* Férussac, 1821), is hereby placed on the Official List of Specific Names in Zoology.

(4) The name HELICARIONIDAE Bourguignat, 1883 (correction of HELIXARIONIDAE; type genus *Helicarion* Férussac, 1821) is hereby placed on the Official List of Family-Group Names in Zoology.

(5) The name *Helixarion* Férussac, 1821, ruled in (1)(a) above to be an incorrect original spelling of *Helicarion*, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

(6) The name HELIXARIONIDAE Bourguignat, 1883 is hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology (an incorrect original spelling of HELICARIONIDAE).

History of Case 2739

An application for the conservation of *Helicarion* Férussac, 1821, and the designation of *Helixarion cuvieri* Férussac, 1821 as the type species, was received from Drs Brian J. Smith (Shepparton, Victoria, Australia) and Ron C. Kershaw (Launceston, Tasmania, Australia) on 7 September 1989. After correspondence the case was published in BZN 47: 258–262 (December 1990). Notice of the case was sent to appropriate journals.

A comment from Dr Gary Rosenberg (*The Academy of Natural Sciences, Philadelphia, Pennsylvania, U.S.A.*) was published in BZN 48: 140 (June 1991), together with a reply by the authors of the application. Dr Rosenberg supported the designation of *Helixarion cuvieri* Férussac, 1821 as the type species of *Helicarion* Férussac, 1821, but opposed the adoption of the name *Helicarion*, although he noted that this spelling ('corrected' from *Helixarion* by Férussac himself in 1821) had had the greater usage. It was noted on the voting paper that the application (para. 3) recorded only two uses of *Helixarion* this century; a third was Abbott (1989), who however used HELICARIONIDAE, as pointed out by Dr Rosenberg.

To settle the question of *Helixarion* versus *Helicarion*, Commissioners were asked to vote for or against proposal (1)(a) in BZN 47: 260 on the understanding that the entries on the Official Lists (proposals (2)–(6) in BZN 47: 261) would be made in accordance with the result.

Decision of the Commission

On 1 December 1991 the members of the Commission were invited to vote on the proposals published in BZN 47: 260–261. At the close of the voting period on 1 March 1992 the votes were as follows:

Proposal (1)(a). Affirmative votes — 25: Bayer, Bock, Bouchet, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Kabata, Kraus, Lehtinen, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 4: Cocks, Holthuis, Macpherson and Štys.

Proposals (1)(b)–(6). Affirmative votes — 27: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen (in part), Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 1: Macpherson.

No vote was received from Mahnert.

Original references

The following are the original references to the names placed on Official Lists and Official Indexes by the ruling given in the present Opinion:

cuvieri, *Helixarion*, Férussac, 1821, *Tableaux systématiques des animaux mollusques... suivis d'un prodrome général...*, p. 23 (folio), p. 19 (quarto).

Helicarion Férussac, 1821, *Tableaux systématiques des animaux mollusques... suivis d'un prodrome général...*, p. 23 (folio), p. 19 (quarto) (incorrectly spelled as *Helixarion*).

HELICARIONIDAE Bourguignat, 1883, *Annales des Sciences Naturelles (Zoologie)*, (6)15: art. 2, p. 9 (incorrectly spelled as HELIXARIONIDAE).

Helixarion Férussac, 1821, *Tableaux systématiques des animaux mollusques... suivis d'un prodrome général...*, p. 23 (folio), p. 19 (quarto) (an incorrect original spelling of *Helicarion*).

HELIXARIONIDAE Bourguignat, 1883, *Annales des Sciences Naturelles (Zoologie)*, (6)15: art. 2, p. 9 (an incorrect original spelling of HELICARIONIDAE).

The following is the reference for the designation of *Helicarion cuvieri* Férussac, 1821 as the type species of the nominal genus *Helicarion* Férussac, 1821:

Gray, J.E. 1847. *Proceedings of the Zoological Society of London*, 15: 169.

The following is the reference for the designation of the neotype of *Helicarion cuvieri* Férussac, 1821:

Kershaw, R.C. 1979. *Journal of the Malacological Society of Australia*, 4(3): 150.

OPINION 1679

***Kobeltia* Seibert, 1873 (Mollusca, Gastropoda): *Arion hortensis* Férussac, 1819 confirmed as the type species**

Ruling

(1) It is hereby confirmed that the nominal species *Arion hortensis* Férussac, 1819 is the type species of the genus *Kobeltia* Seibert, 1873.

(2) The name *Kobeltia* Seibert, 1873 (gender: feminine), type species confirmed in (1) above as *Arion hortensis* Férussac, 1819, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *hortensis* Férussac, 1819, as published in the binomen *Arion hortensis* and as defined by the lectotype designated by De Winter (1984) (specific name of the type species of *Kobeltia* Seibert, 1873), is hereby placed on the Official List of Specific Names in Zoology.

History of Case 2670

An application for the confirmation of *Arion hortensis* Férussac, 1819 as the type species of *Kobeltia* Seibert, 1873 was received from Dr Thierry Backeljau (*Koninklijk Belgisch Instituut voor Natuurwetenschappen, Brussel, Belgium*) on 28 June 1988. After correspondence the case was published in BZN 47: 270–273 (December 1990). Notice of the case was sent to appropriate journals. It was noted on the voting paper that the application was supported by Dr N.J. Evans (*The Natural History Museum, London, U.K.*).

Decision of the Commission

On 1 December 1991 the members of the Commission were invited to vote on the proposals published in BZN 47: 271–272. At the close of the voting period on 1 March 1992 the votes were as follows:

Affirmative votes — 28: Bayer, Bock, Bouchet, Cocks, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — none.

No vote was received from Cogger.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

hortensis, *Arion*, Férussac, 1819, *Histoire naturelle, générale et particulière des mollusques terrestres et fluviatiles...*, p. 65.

Kobeltia Seibert, 1873, *Nachrichtsblatt der deutschen Malakozologischen Gesellschaft*, 6: 81.

The following is the reference for the designation of the lectotype of *Arion hortensis* Férussac, 1819:

De Winter, A.J. 1984. *Zoologische Mededelingen, Leiden*, 59(1): 3.

OPINION 1680

Buthus vittatus Say, 1821 (currently *Centruroides vittatus*), *Centrurus hentzi* Banks, 1904 (currently *Centruroides hentzi*) and *Buthus vittatus* Guérin Méneville, [1838] (currently *Bothriurus vittatus*) (Arachnida, Scorpionida): specific names conserved

Ruling

- (1) Under the plenary powers:
 - (a) the adult male specimen in the U.S. National Museum, Washington, D.C. labelled '*Buthus vittatus* Say, 1821, NEOTYPE, Det. S.A. Stockwell' from 'Brackettville, Kinney Co., Texas, 21 May 1984 (S.A. Stockwell)' is hereby designated as the neotype of *Buthus vittatus* Say, 1821;
 - (b) the specific name *vittatus* Guérin Méneville, [1838], as published in the binomen *Buthus vittatus*, is hereby ruled to be not invalid by reason of being a junior primary homonym of *Buthus vittatus* Say, 1821.
- (2) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *vittatus* Say, 1821, as published in the binomen *Buthus vittatus* and as defined by the neotype designated in (1)(a) above;
 - (b) *vittatus* Guérin Méneville, [1838], as published in the binomen *Buthus vittatus* (not invalid despite being a junior primary homonym of *Buthus vittatus* Say, 1821);
 - (c) *hentzi* Banks, 1904, as published in the binomen *Centrurus hentzi*.

History of Case 2637

The name *Buthus vittatus* Say, 1821 was based on a species of scorpion from Florida and Georgia, U.S.A. An application by Drs Scott A. Stockwell (*U.S. Army Natick Research, Development and Engineering Center, Natick, Massachusetts, U.S.A.*) and Herbert W. Levi (*Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts, U.S.A.*), published in BZN 46: 233–235 (December 1989), sought to designate a neotype for *vittatus* in the sense in which the name has long been used for a species from Texas. It was also proposed that the name should be adopted from Wood (1863), the first author to describe the Texan species (although using the name in synonymy), so conserving *hentzi* Banks, 1904, the name currently in use for the Florida species. Notice of the case was sent to appropriate journals.

Subsequent to publication of the application it became apparent that adoption of *vittatus* from Wood (1863) had a number of disadvantages (set out in BZN 48: 55, March 1991), including a primary homonym, *Buthus vittatus* Guérin Méneville, [1838], which would be senior to *vittatus* 'Wood, 1863' and render the latter invalid. Drs Stockwell and Levi therefore revised their proposals, retaining the original authorship of *vittatus* Say, 1821 and using the plenary powers to designate a neotype in accord with current usage. This would remove the synonymy with *hentzi* Banks, 1904.

A comment from Dr Vincent D. Roth (*Portal, Arizona, U.S.A.*) in support of the conservation of the names *Centruroides vittatus* (Say, 1821) and *C. hentzi* (Banks, 1904) for the Texas and Florida species respectively was published in BZN 48: 56.

A comment from Dr W. David Sissom (*Elon College, North Carolina, U.S.A.*), published in BZN 48: 56, supported the conservation of the name *vittatus* Say, 1821. Dr Sissom also proposed the conservation of *vittatus* Guérin Méneville, [1838]; the name is a junior primary homonym of *vittatus* Say, 1821 but the species has been included in the genus *Bothriurus* Peters, 1861 since 1876 and its name has never been replaced. The name is currently in use for a species of scorpion from Chile.

The Commission was asked to vote separately on the revised application to conserve the name *vittatus* Say, 1821 by designating a neotype, thereby also conserving *hentzi* Banks, 1904 (proposals published in BZN 48: 55), and on the application to conserve *Buthus vittatus* Guérin Méneville, [1838] (proposals published in BZN 48: 56).

Decision of the Commission

On 1 December 1991 the members of the Commission were invited to vote on the proposals published in BZN 48: 55 and 56. At the close of the voting period on 1 March 1992 the votes were as follows:

Proposals published in BZN 48: 55. Affirmative votes — 28: Bayer, Bock, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — none.

Bouchet abstained.

Proposals published in BZN 48: 56. Affirmative votes — 21: Bayer, Bock, Cocks, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Nielsen, Nye, Ride, Schuster, Trjapitzin, Uéno, Willink

Negative votes — 8: Bouchet, Cogger, Holthuis, Minelli, Savage, Starobogatov, Štys and Thompson.

Original references

The following are the original references to the names placed on an Official List by the ruling given in the present Opinion:

hentzi, *Buthus*, Banks, 1904, *Proceedings of the Academy of Natural Sciences of Philadelphia*, 56: 142.

vittatus, *Buthus*, Guérin Méneville, [1838], in Lesson, R.P. (Ed.), *Voyage autour du monde, exécuté par ordre du Roi, sur la corvette de sa Majesté, La Coquille, pendant les années 1822, 1823, 1824 et 1825. Par L.I. Duperrey*, Zoologie, vol. 2, part 2.1, p. 50.

vittatus, *Buthus*, Say, 1821, *Journal of the Philadelphia Academy of Sciences*, 1: 61.

OPINION 1681

Vatellus Aubé, [1837] (Insecta, Coleoptera): conserved

Ruling

(1) Under the plenary powers the generic name *Leucorea* Laporte, 1835 is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The name *Vatellus* Aubé, [1837] (gender: masculine), type species by monotypy of the replaced nominal genus *Leucorea* Laporte, 1835 *Hydroporus tarsatus* Laporte, 1835, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *tarsatus* Laporte, 1835, as published in the binomen *Hydroporus tarsatus* (specific name of the type species of *Vatellus* Aubé, [1837]), is hereby placed on the Official List of Specific Names in Zoology.

(4) The name *Leucorea* Laporte, 1835, as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

History of Case 2742

An application for the conservation of *Vatellus* Aubé, [1837] was received from Dr Anders N. Nilsson (*University of Umeå, Umeå, Sweden*) on 25 September 1989. After correspondence the case was published in BZN 48: 36–37 (March 1991). Notice of the case was sent to appropriate journals. No comments were received.

It was noted on the voting paper that proposals (2) and (3) in BZN 48: 37, para. 7 should be amended to read as above.

It was also noted that the dates of publication of Aubé's ([1836–1838]) work *Hydrocanthares* were given by Méquignon in a footnote in Guignot (1931–1933, pp. 547–548). The date 1837 is given for pp. 65–224, which included the name *Vatellus* (p. 221).

Guignot, F. 1931–1933. *Les Hydrocanthares de France*. xv, 1057 pp. Douladoure, Toulouse.

Decision of the Commission

On 1 December 1991 the members of the Commission were invited to vote on the proposals published in BZN 48: 36–37, with the above amendments to (2) and (3). At the close of the voting period on 1 March 1992 the votes were as follows:

Affirmative votes — 26: Bayer, Bock, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Trjapitzin, Uéno, Willink

Negative votes — 3: Bouchet, Lehtinen and Thompson.

Dupuis commented that he reluctantly voted in favour, in consideration of the usage of *Vatellus*; it was clear that Aubé had had no objective reason (not even that of conditional proposal of the name) to reject *Leucorea*, and that the sentence used by the aristocratic Laporte in establishing the genus (quoted in para. 1 of the application) was merely an 'understatement' resulting from politeness, and was typical of the period. Lehtinen commented that since Aubé was aware of Laporte's earlier name with the

same type species, disregard for priority, the basic principle of nomenclature, could not be supported.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

Leucorea Laporte, 1835, *Études entomologiques*, part 1 (Carnassiers), p. 106.

tarsatus, *Hydroporus*, Laporte, 1835, *Études entomologiques*, part 1 (Carnassiers), p. 106.

Vatellus Aubé, [1837], *Hydrocanthares*. In Dejean, P.F.M.A. (Ed.), *Iconographie et histoire naturelle des coléoptères d'Europe*, vol. 5, p. 221.

OPINION 1682

Plusia falcifera Kirby, 1837 (currently *Anagrapha falcifera*; Insecta, Lepidoptera): specific name conserved

Ruling

(1) Under the plenary powers the specific name *norma* Hübner, [1821], as published in the binomen *Autographa norma*, is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The name *falcifera* Kirby, 1837, as published in the binomen *Plusia falcifera*, is hereby placed on the Official List of Specific Names in Zoology.

(3) The name *norma* Hübner, [1821], as published in the binomen *Autographa norma* and as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 2748

An application for the conservation of the specific name of *Plusia falcifera* Kirby, 1837 was received from Drs J. Donald Lafontaine (*Biosystematics Research Centre, Agriculture Canada, Ottawa, Canada*) and Robert W. Poole (*Systematic Entomology Laboratory, c/o National Museum of Natural History, Washington, D.C., U.S.A.*) on 13 November 1989. After correspondence the case was published in BZN 48: 41–42 (March 1991). Notice of the case was sent to appropriate journals. No comments were received.

Decision of the Commission

On 1 December 1991 the members of the Commission were invited to vote on the proposals published in BZN 48: 42. At the close of the voting period on 1 March 1992 the votes were as follows:

Affirmative votes — 26: Bayer, Bock, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Schuster, Starobogatov, Stys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 2: Bouchet and Lehtinen.

No vote was received from Savage.

Original references

The following are the original references to the names placed on an Official List and an Official Index by the ruling given in the present Opinion:

falcifera, *Plusia*, Kirby, 1837, in Richardson, J. (Ed.), *Fauna Boreali-Americana*, part 4 (The insects), p. 308.

norma, *Autographa*, Hübner, [1821], *Verzeichniss bekannter Schmettlinge*, p. 251.

OPINION 1683

***Simulium (Nevermannia) juxtacrenobium* (Insecta, Diptera): specific name first available from the intended original description by Bass & Brockhouse, 1990**

Ruling

(1) Under the plenary powers it is hereby ruled that the specific name *juxtacrenobium* Bass & Brockhouse, 1990, as published in the binomen *Simulium (Nevermannia) juxtacrenobium*, is deemed to be first available from that work and to be unavailable from its publication as *Simulium juxtacrenobium* by Brockhouse, Bass, Feraday & Straus (1989).

(2) The name *juxtacrenobium* Bass & Brockhouse, 1990, as published in the binomen *Simulium (Nevermannia) juxtacrenobium*, is hereby placed on the Official List of Specific Names in Zoology.

History of Case 2799

An application for the specific name of *Simulium (Nevermannia) juxtacrenobium* to be ruled as first available from the intended original description by Bass & Brockhouse (1990) was received from Drs Jon A.B. Bass (*Institute of Freshwater Ecology, Monkswood Experimental Station, Abbots Ripton, Huntingdon, U.K.*) and Charles Brockhouse (*University of Toronto, Toronto, Canada*) on 17 December 1990. After correspondence the case was published in BZN 48: 43–44 (March 1991). Notice of the case was sent to appropriate journals. No comments were received.

Decision of the Commission

On 1 December 1991 the members of the Commission were invited to vote on the proposals published in BZN 48: 44. At the close of the voting period on 1 March 1992 the votes were as follows:

Affirmative votes — 27: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Trjapitzin, Uéno, Willink

Negative votes — 2: Štys and Thompson.

Kraus commented that he hesitated in voting for the proposal since no serious problems would be caused by the situation: there was no doubt what was meant. Štys commented that cases involving changed authorship and definition of a name because publications appeared in an unintended order were frequent; he considered they should be covered by the Code and not be dealt with individually. Thompson said a neotype designation could have allowed the name *juxtacrenobium* to be taken from the 1989 paper.

Original references

The following is the original reference to the name placed on an Official List by the ruling given in the present Opinion:

juxtacrenobium, *Simulium (Nevermannia)*, Bass & Brockhouse, 1990, *Aquatic Insects*, 12(2): 65.

OPINION 1684

Lepomis Rafinesque, 1819 (Osteichthyes, Perciformes): gender fixed as masculine

Ruling

(1) Under the plenary powers the gender of the name *Lepomis* Rafinesque, 1819 is hereby ruled to be masculine.

(2) The name *Lepomis* Rafinesque, 1819 (gender: masculine, as ruled in (1) above), type species by original designation *Labrus auritus* Linnaeus, 1758, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *auritus* Linnaeus, 1758, as published in the binomen *Labrus auritus* (specific name of the type species of *Lepomis* Rafinesque, 1819), is hereby placed on the Official List of Specific Names in Zoology.

History of Case 2715

An application for the gender of the name *Lepomis* Rafinesque, 1819 to be fixed as masculine was received from Profs David A. Etnier (*University of Tennessee, Knoxville, Tennessee, U.S.A.*) and Melvin L. Warren Jr. (*Southern Illinois University, Carbondale, Illinois, U.S.A.*) on 1 March 1989. After correspondence the case was published in BZN 47: 280–282 (December 1990). Notice of the case was sent to appropriate journals.

A comment from Dr Reeve M. Bailey (*Museum of Zoology, University of Michigan, Ann Arbor, U.S.A.*), published in BZN 48: 253–254 (September 1991), noted that while *Lepomis* Rafinesque, 1819 is feminine under a strict interpretation of Article 30b of the Code, it had had 'highly consistent treatment' as masculine, and that the American Fisheries Society had agreed this should be continued pending resolution of the case. A comment in support of the application from Prof C. Richard Robins (*Rosensteil School of Marine and Atmospheric Science, Miami, Florida, U.S.A.*) was also published in BZN 48: 254, together with a report of support from a further six ichthyologists. Among these, Prof Robert E. Jenkins (*Roanoke College, Salem, Virginia, U.S.A.*) noted (in litt.) that he would treat *Lepomis* as masculine in his forthcoming book (1992) on the freshwater fishes of Virginia, to be published by the American Fisheries Society and therefore to receive wide circulation. Prof Brooks M. Burr (*Southern Illinois University at Carbondale, Carbondale, Illinois, U.S.A.*) reported that in a field guide to 790 species of freshwater fishes of North America north of Mexico, co-authored by Prof L. Page and himself, *Lepomis* had been treated as masculine 'in accordance with common and consistent practice over the past 40 years'.

Decision of the Commission

On 1 December 1991 the members of the Commission were invited to vote on the proposals published in BZN 47: 281. At the close of the voting period on 1 March 1992 the votes were as follows:

Affirmative votes — 24: Bayer, Bock, Bouchet, Cocks, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Štys, Thompson, Uéno

Negative votes — 3: Cogger, Starobogatov and Trjapitzin.

No votes were received from Kraus and Willink.

Holthuis commented that he voted in favour of the proposal to remove any doubts that might exist on the gender of the generic name; since the original author (Rafinesque) had treated it as masculine, the name should be treated as such and Commission action was unnecessary.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

auritus, *Labrus*, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 283.

Lepomis Rafinesque, 1819, *Journal de Physique, de Chimie, d'Histoire Naturelle et des Arts*, **88**: 420.

OPINION 1685

Rana sphenocephala Cope, 1886 (Amphibia, Anura): given precedence over *Rana utricularius* Harlan, 1826

Ruling

(1) Under the plenary powers the specific name *sphenocephala* Cope, 1886, as published in the trinomen *Rana halecina sphenocephala*, is hereby given precedence over the specific name *utricularius* Harlan, 1826, as published in the binomen *Rana utricularius*, whenever the two names are considered to be synonyms.

(2) The following names are hereby placed on the Official List of Specific Names in Zoology:

- (a) *sphenocephala* Cope, 1886, as published in the trinomen *Rana halecina sphenocephala*, with the endorsement that it is to be given precedence over *utricularius* Harlan, 1826, as published in the binomen *Rana utricularius*, whenever the two names are considered to be synonyms;
- (b) *utricularius* Harlan, 1826, as published in the binomen *Rana utricularius*, with the endorsement that it is not to be given priority over *sphenocephala* Cope, 1886, as published in the trinomen *Rana halecina sphenocephala*, whenever the two names are considered to be synonyms.

History of Case 2141

An application for *Rana sphenocephala* Cope, 1886 to be given precedence over *Rana utricularius* Harlan, 1826 was received from Profs Lauren E. Brown (*Illinois State University, Normal, Illinois, U.S.A.*), Hobart M. Smith (*University of Colorado, Boulder, Colorado, U.S.A.*) and Richard S. Funk (*University of Tennessee, Knoxville, Tennessee, U.S.A.*) on 19 October 1990. After correspondence the case was published in BZN 47: 283–285 (December 1990). Notice of the case was sent to appropriate journals.

A case for the conservation of the specific name *sphenocephala* Cope, 1886 by the suppression of *utricularius* Harlan, 1826 was published in 1977 (BZN 33: 195–203). Comments in support and opposition were published in BZN 34: 199–200 (February 1978) and 39: 80–84 (June 1982), and a reply by the authors of the application was published in BZN 39: 84–90. The opposition applied particularly to the suppression of *utricularius* and was largely on taxonomic grounds; because of this an impasse was reached and the case remained unresolved. In the past decade both specific names have had use (BZN 47: 284, para. 7), with *sphenocephala* predominating. The second application briefly reviewed the history and sought to give *sphenocephala* precedence over *utricularius* without suppressing the latter name.

On 7 May 1991 a letter in opposition was received from Dr George R. Zug (*National Museum of Natural History, Washington, D.C., U.S.A.*). Dr Zug stated that his letter was 'for the Commission members' attention' and not for publication; a version for publication was requested but not received. Dr Zug had opposed the earlier application on taxonomic grounds (see BZN 39: 80–81) which were not accepted by the applicants

(BZN 39: 84–90). In his recent letter Dr Zug said that he would not repeat those points again but 'I remain opposed to the use of a junior synonym (*sphenocephala*) when a valid senior name (*utricularius*) is available and has been used recently and in major publications... Since Pace (1974) the name *utricularius* was gaining increasing use until Brown et al. published a note that *sphenocephala* should be used... The list of 103 references [from 1924–1974] using *sphenocephala* [see para. 5 of the application] has little bearing because its prior use was conceptually different from Pace's *utricularius* and thus from the concept of *sphenocephala* now being supported by Brown et al.... Please allow priority to determine usage'.

Dr Zug considered that *utricularius* Harlan, 1826 was the valid synonym of *sphenocephala* Cope, 1886. Prof Brown et al. believed that *utricularius* probably corresponded to *pipiens* Schreber, 1782; they pointed out that *utricularius* was unused until Pace (1974) and urged that *sphenocephala* should be conserved for the southern leopard frog for which it was in use. In an effort to settle the case they rescinded their previous request for the suppression of *utricularius*, which could remain available for a taxon within the '*R. pipiens* complex'.

A comment in support of the proposal by Brown et al. from Dr David M. Hollis (University of Texas, Austin, Texas, U.S.A.) was published in BZN 47: 298–299 (December 1990). Support was also received from Prof Jay M. Savage (University of Miami, Florida, U.S.A.).

Decision of the Commission

On 1 December 1991 the members of the Commission were invited to vote on the proposals published in BZN 47: 284–285. At the close of the voting period on 1 March 1992 the votes were as follows:

Affirmative votes — 20: Bock, Cocks, Corliss, Hahn, Halvorsen, Heppell (in part), Holthuis, Kabata, Kraus, Lehtinen, Mahnert, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Trjapitzin, Uéno, Willink

Negative votes — 9: Bayer, Bouchet, Cogger, Dupuis, Macpherson, Martins de Souza, Starobogatov, Štys and Thompson.

Heppell commented that to give one name precedence over the other was inappropriate since it did not seem possible to associate the name *Rana utricularius* Harlan, 1826 with any particular segregate; *R. sphenocephala* Cope, 1886 should be conserved to maintain stability and he therefore supported the proposal to place it on the Official List, but without any endorsement. He noted that it had been made clear in the revised application that *utricularius* was unused because of its accepted synonymy with the senior name *R. pipiens* Schreber, 1782, and that nothing in the original description of *utricularius* indicated that Pace (1974) was correct in regarding the taxon as a senior synonym of *sphenocephala*. The inadequate description, absence of type material (other than Pace's contentious neotype) and ill-defined type locality meant that *utricularius* was a nomen dubium. The resurrection of a name long accepted as a junior synonym of one taxon in order to upset the long-established usage of another was unjustifiable. Cogger commented that, since *sphenocephala* and *utricularius* continued to appear in the literature as intraspecific names, to give one precedence was inappropriate and priority should apply. Dupuis, Macpherson, Martins da Souza and Štys commented that the taxonomy of the group was still unsettled.

Original references

The following are the original references to the names placed on an Official List by the ruling given in the present Opinion:

sphenocephala, *Rana halecina*, Cope, 1886, *Proceedings of the American Philosophical Society*, **23**: 517.

utricularius, *Rana*, Harlan, 1826, *American Journal of Science and Arts*, (1)**10**: 60.

OPINION 1686

***Natrix gemonensis* Laurenti, 1768 (currently *Coluber gemonensis*), *Coluber viridiflavus* Lacépède, 1789 and *Coluber helveticus* Lacépède, 1789 (currently *Natrix natrix helvetica*) (Reptilia, Serpentes): specific names conserved**

Ruling

- (1) Under the plenary powers:
 - (a) all previous fixations of type specimens for the nominal species *Natrix gemonensis* Laurenti, 1768 are hereby set aside and specimen no. 1357.70 in the Muséum d'Histoire Naturelle, Geneva, for which the data are given in BZN 48: 51, para. 4, is designated as the neotype;
 - (b) the following specific names are hereby ruled to be available despite having been published in a rejected work:
 - (i) *helveticus* Lacépède, 1789, as published in the binomen *Coluber helveticus*;
 - (ii) *viridiflavus* Lacépède, 1789, as published in the binomen *Coluber viridi-flavus*.
- (2) The following specific names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *gemonensis* Laurenti, 1768, as published in the binomen *Natrix gemonensis*, and as defined by the neotype designated in (1)(a) above;
 - (b) *helveticus* Lacépède, 1789, as published in the binomen *Coluber helveticus* and as conserved in (1)(b)(i) above;
 - (c) *viridiflavus* Lacépède, 1789, as published in the binomen *Coluber viridi-flavus* and as conserved in (1)(b)(ii) above.

History of Case 2675

An application for the conservation of the specific names of *Natrix gemonensis* Laurenti, 1768, *Coluber viridiflavus* Lacépède, 1789 and *Coluber helveticus* Lacépède, 1789 was received from Dr Beat Schätti (Muséum d'Histoire Naturelle, Genève, Switzerland), Mr Andrew F. Stimson (The Natural History Museum, London, U.K.) and Dr Klaus Henle (Johann Wolfgang Goethe-Universität, Frankfurt am Main, Germany) on 1 August 1988. After correspondence the case was published in BZN 48: 50–52 (March 1991). Notice of the case was sent to appropriate journals. No comments were received.

Decision of the Commission

On 1 December 1991 the members of the Commission were invited to vote on the proposals published in BZN 48: 51–52. At the close of the voting period on 1 March 1992 the votes were as follows:

Affirmative votes — 27: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Minelli, Nielsen, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — none.

No votes were received from Martins de Souza and Nye.

Original references

The following are the original references to the names placed on an Official List by the ruling given in the present Opinion:

gemonensis, *Natrix*, Laurenti, 1768, *Specimen medicum, exhibens synopsin reptilium emendatum...*, p. 76.

helveticus, *Coluber*, Lacépède, 1789, *Histoire naturelle des quadrupèdes ovipares et des serpents*, vol. 2 (*Histoire naturelle des serpents*), p. 100.

viridiflavus, *Coluber*, Lacépède, 1789, *Histoire naturelle des quadrupèdes ovipares et des serpents*, vol. 2 (*Histoire naturelle des serpents*), p. 86.

OPINION 1687

Phorusrhacos Ameghino, 1887 (Aves, Gruiformes): not suppressed

Ruling

(1) The name *Phorusrhacos* Ameghino, 1887 (gender: masculine), type species by monotypy *Phorusrhacos longissimus* Ameghino, 1887, is hereby placed on the Official List of Generic Names in Zoology.

(2) The name *longissimus* Ameghino, 1887, as published in the binomen *Phorusrhacos longissimus* (specific name of the type species of *Phorusrhacos* Ameghino, 1887), is hereby placed on the Official List of Specific Names in Zoology.

(3) The name PHORUSRHACIDAE Ameghino, 1889 (correction of Phororhacosidae; type genus *Phorusrhacos* Ameghino, 1887) is hereby placed on the Official List of Family-Group Names in Zoology.

(4) The name *Phororhacos* Ameghino, 1889 is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology (an unjustified emendation of *Phorusrhacos* Ameghino, 1887).

(5) The following names are hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology:

- (a) PHORORHACOSIDAE Ameghino, 1889 (an incorrect original spelling of PHORUSRHACIDAE);
- (b) PHORORHACIDAE Lydekker, 1893 (an incorrect spelling of PHORUSRHACIDAE).

History of Case 2723

An application for the conservation of *Phororhacos* Ameghino, 1889 was received from Drs Luis M. Chiappe & Miguel F. Soria (*Museo Argentino de Ciencias Naturales, Buenos Aires, Argentina*) on 5 May 1989. After correspondence the case was published in BZN 47: 198–201 (September 1990). Notice of the case was sent to appropriate journals.

An opposing comment from Dr Storrs L. Olson (*National Museum of Natural History, Smithsonian Institution, Washington, D.C., U.S.A.*) was published in BZN 48: 156–157 (June 1991), together with a comment from Prof Walter J. Bock (Chairman of the Standing Committee on Ornithological Nomenclature (SCON); *Columbia University, New York, U.S.A.*) reporting on the support for the application from the members of SCON. Dr Olson stated that, following the work of Brodkorb (1963, 1967) and as mentioned by the authors of the application (para. 8 in BZN 47: 199), the prior spelling *Phorusrhacos* Ameghino, 1887 was the name in current use and he considered that it would therefore be a mistake to suppress it. Instead of the proposals in BZN 47: 199, which sought to suppress *Phorusrhacos* and place *Phororhacos* Ameghino, 1889 on the Official List, Dr Olson proposed that *Phorusrhacos* should be confirmed as the valid name for the genus, with the concomitant family-group name PHORUSRHACIDAE Ameghino, 1889.

It was noted on the voting paper that *Phororhacos* (1889) was an unjustified emendation of *Phorusrhacos* (1887) but was in exclusive use for many years. The rejection of *Phorusrhacos* as a nomen oblitum by Cracraft (1968) under Article 23b of the 1964 Code (see Article 79c(iii) of the current Code) was not strictly correct, since

Brodkorb (1963, 1967) had resurrected this spelling, but it had been argued (para. 7 of the application and comment by Prof Bock) that Brodkorb himself should have made the rejection. However, he did not do so, and *Phorusrhacos* entered use, with consequent lack of uniformity.

Both alternatives, the original proposal for the conservation of *Phororhacos* Ameghino, 1889 by the suppression of *Phorusrhacos* Ameghino, 1887 (BZN 47: 199; Proposal A), and the placement of *Phorusrhacos* Ameghino, 1887 on the Official List (BZN 48: 157; Proposal B), were offered for voting. The latter course did not involve the use of the Commission's plenary powers. The family name placed on the Official List would be PHORORHACIDAE or PHORUSRHACIDAE respectively.

Decision of the Commission

On 1 December 1991 the members of the Commission were invited to vote on the proposals published in BZN 47: 199. At the close of the voting period on 1 March 1992 the votes were as follows:

Proposal A — 14: Bock, Corliss, Dupuis, Hahn, Heppell, Kraus, Mahnert, Martins de Souza, Nielsen, Ride, Savage, Starobogatov, Uéno and Willink.

Proposal B — 15: Bayer, Bouchet, Cocks, Cogger, Halvorsen, Holthuis, Kabata, Lehtinen, Macpherson, Minelli, Nye, Schuster, Štys, Thompson and Trjapitzin.

Cocks commented that he agreed with Olson that priority and recent usage should be followed. Kabata noted that both proposals A and B had merit and that under these circumstances priority should be followed.

Original references

The following are the original references to the names placed on Official Lists and Official Indexes by the ruling given in the present Opinion:

longissimus, *Phorusrhacos*, Ameghino, 1887, *Boletín del Museo de La Plata*, 1887: 24.

PHORORHACIDAE Lydekker, 1893, *The Ibis*, 5: 43 (an incorrect spelling of PHORUSRHACIDAE).

Phororhacos Ameghino, 1889, *Actas de la Academia Nacional de Ciencias de Córdoba*, 6: 659.

PHORORHACOSIDAE Ameghino, 1889, *Actas de la Academia Nacional de Ciencias de Córdoba*, 6: 659 (an incorrect original spelling of PHORUSRHACIDAE).

PHORUSRHACIDAE Ameghino, 1889, *Actas de la Academia Nacional de Ciencias de Córdoba*, 6: 659 (incorrectly spelled as PHORORHACOSIDAE).

Phorusrhacos Ameghino, 1887, *Boletín del Museo de La Plata*, 1887: 24.

OPINION 1688

Coccyzus euleri Cabanis, 1873 (Aves, Cuculiformes): specific name conserved

Ruling

(1) Under the plenary powers the specific name *julieni* Lawrence, [1864], as published in the binomen *Coccyzus julieni*, is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The name *euleri* Cabanis, 1873, as published in the binomen *Coccygus* (= *Coccyzus*) *euleri*, is hereby placed on the Official List of Specific Names in Zoology.

(3) The name *julieni* Lawrence, [1864], as published in the binomen *Coccyzus julieni* and as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 2727

An application for the conservation of the specific name of *Coccyzus euleri* Cabanis, 1873 was received from Drs Edwin O. Willis and Y. Oniki (*Universidade Estadual Paulista, São Paulo, Brazil*) on 14 June 1989. After correspondence the case was published in BZN 47: 195–197 (September 1990). Notice of the case was sent to appropriate journals.

An opposing comment from Dr Richard C. Banks (*National Museum of Natural History, Washington, D.C., U.S.A.*) was published in BZN 48: 155–156 (June 1991), together with a comment from Prof Walter J. Bock (Chairman of the Standing Committee on Ornithological Nomenclature (SCON); *Columbia University, New York, U.S.A.*) reporting on the support for the application from the members of SCON. A reply to Dr Banks's comment by the authors of the application was published in BZN 48: 254–255 (September 1991), together with a further comment in support from Drs Kenneth C. Parkes and D. Scott Wood (*Carnegie Museum of Natural History, Pittsburg, Pennsylvania, U.S.A.*).

Decision of the Commission

On 1 December 1991 the members of the Commission were invited to vote on the proposals published in BZN 47: 196. At the close of the voting period on 1 March 1992 the votes were as follows:

Affirmative votes — 23: Bayer, Bock, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Holthuis, Kraus, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Ride, Savage, Schuster, Starobogatov, Štys, Trjapitzin, Uéno, Willink

Negative votes — 5: Bouchet, Heppell, Lehtinen, Nye and Thompson.

No vote was received from Kabata.

Nye commented that, since the senior synonym, *Coccyzus julieni* Lawrence, [1864], has had some usage in recent years for the South American species, priority should prevail.

Original references

The following are the original references to the names placed on an Official List and an Official Index by the ruling given in the present Opinion:

euleri, *Coccyzus*, Cabanis, 1873, *Journal für Ornithologie*, (4)1(1): 72.

julieni, *Coccyzus*, Lawrence, [1864], *Annals of the Lyceum of Natural History of New York*, **8**: 42
(Issued in the serial in 1867 but published as a separate in [1864]).

INSTRUCTIONS TO AUTHORS

The following notes are primarily for those preparing applications to the Commission; other authors should comply with the relevant sections. Applications should be prepared in the format of recent parts of the Bulletin; the Commission's Secretariat reserves the right to return applications not so prepared.

Text. Typed in double spacing, this should consist of numbered paragraphs setting out the details of the case and leading to a final paragraph of formal proposals. Text references should give dates and page numbers in parentheses, e.g. 'Daudin (1800, p. 39) described ...'. The Abstract will be prepared by the Secretariat.

References. These should be given for all authors cited. The title of periodicals should be in full and be underlined; numbers of volumes, parts, etc. should be in arabic figures, separated by a colon from page numbers. Book titles should be underlined and followed by the number of pages, the publisher and place of publication.

Submission of Application. Two copies should be sent to: The Executive Secretary, the International Commission on Zoological Nomenclature, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. It would help to reduce the time that it takes to process the large number of applications received if the typescript could be accompanied by a disk with copy in ASCII text in IBM PC format. It would also be helpful if applications were accompanied by photocopies of relevant pages of the main references where this is possible.

Applicants would be well advised to discuss their cases with other workers in the same field before submitting applications, so that they are aware of any wider implications and the likely reactions of other zoologists.

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The Bulletin of Zoological Nomenclature

*[ICZN] The Official Periodical
of the International Commission
on Zoological Nomenclature*

THE BULLETIN OF ZOOLOGICAL NOMENCLATURE

The *Bulletin* is published four times a year for the International Commission on Zoological Nomenclature by the International Trust for Zoological Nomenclature, a charity (no. 211944) registered in England. The annual subscription for 1992 is £75 or \$145, postage included; the rate for 1993 will be £80 or \$155. All manuscripts, letters and orders should be sent to:

The Executive Secretary,
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BULLETIN OF ZOOLOGICAL NOMENCLATURE

Volume 49, part 3 (pp. 181–252)

30 September 1992

Notices

(a) *Invitation to comment.* The Commission is authorised to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after their publication, but this period is normally extended to enable comments to be submitted. Any zoologist who wishes to comment on any of the applications is invited to send his contribution to the Executive Secretary of the Commission as quickly as possible.

(b) *Invitation to contribute general articles.* At present the *Bulletin* comprises mainly applications concerning names of particular animals or groups of animals, resulting comments and the Commission's eventual rulings (Opinions). Proposed amendments to the Code are also published for discussion.

Articles or notes of a more general nature are actively welcomed provided that they raise nomenclatural issues, although they may well deal with taxonomic matters for illustrative purposes. It should be the aim of such contributions to interest an audience wider than some small group of specialists.

(c) *Receipt of new applications.* The following new applications have been received since going to press for volume 49, part 2 (published on 25 June 1992). Under Article 80 of the Code, existing usage is to be maintained until the ruling of the Commission is published.

- (1) *Ascopora* Trautschold, 1876 (Bryozoa, Cryptostomata): proposed designation of *Ceripora nodosa* Fischer, 1837 as the type species. (Case 2847). P.N. Wyse Jackson.
- (2) *Chromadora* Bastian, 1865 (Nematoda): proposed designation of *C. nudicapitata* Bastian, 1865 as the type species. (Case 2848). P.A.A. Loof.
- (3) BRANCHIOSTEGIDAE Jordan, 1923 (Osteichthyes, Perciformes): proposed precedence over LATILIDAE Jordan & Evermann, 1898. (Case 2849). J. Géry.
- (4) *Phyllphis carinata* Günther, 1864 (currently *Elaphe carinata*; Reptilia, Serpentes): proposed conservation of the specific name. (Case 2850). H.M. Smith, H. Ota & V. Wallach.
- (5) *Nacaduba* Moore, [1881] (Insecta, Lepidoptera): proposed precedence over *Pepliphorus* Hübner, [1819]. (Case 2851). T. Hirowatari.
- (6) *Banksinella luteolateralis* var. *albothorax* Theobald, 1907 (currently *Aedes* (*Neomelaniconion*) *albothorax*), *B. luteolateralis* var. *circumluteola* Theobald, 1908 (currently *A. (N.) circumluteolus*) and *A. (N.) mcintoshi* Huang, 1985 (Insecta, Diptera): proposed conservation of the specific names and designation of a neotype for *A. (N.) albothorax*. (Case 2852). T.J. Zavortink.
- (7) *Robulina nodosa* Reuss, 1863 (currently *Lenticulina nodosa*; Foraminiferida): proposed retention of neotype despite rediscovery of syntypes. (Case 2854). H. Meyn & J. Vespermann.

- (8) *Cristellaria humilis* Reuss, 1863 and *Rotalia schloenbachi* Reuss, 1863 (currently *Astacolus humilis* and *Notoplanulina? schloenbachi*; Foraminiferida): proposed replacement of neotypes by rediscovered lectotypes. (Case 2855). H. Meyn & J. Vespermann.

(d) *Rulings of the Commission*. Each Opinion, Declaration and Direction published in the *Bulletin* constitutes an official ruling of the International Commission on Zoological Nomenclature, by virtue of the votes recorded, and comes into force on the day of publication of the *Bulletin*.

The European Association for Zoological Nomenclature

The European Association for Zoological Nomenclature has recently been established to facilitate liaison between European zoologists and the Commission, and to support the Commission's work. Members will receive a yearly Newsletter with information on the activities of the Association and Commission, and will be able to buy the *Code* and the *Official Lists and Indexes* at substantial discounts.

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The International Code of Zoological Nomenclature

The Third Edition (published 1985) supersedes all earlier versions and incorporates many changes.

Copies can be ordered from I.T.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. or A.A.N.Z., c/o NHB Stop 163, National Museum of Natural History, Washington D.C. 20560, U.S.A. The cost is £19 or \$35, but members of the American Association for Zoological Nomenclature or the European Association for Zoological Nomenclature are offered the reduced price of £15 or \$29; payment should accompany orders.

Official Lists and Indexes of Names and Works in Zoology — Second Supplement to 1990

The Official Lists and Indexes of Names and Works in Zoology was published in 1987. This book gives details of all the names and works on which the Commission has ruled since it was set up in 1895; there are about 9,900 entries.

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In the five years 1986–1990, 946 names and five works were added to the Official Lists and Official Indexes. A supplement has been prepared giving these additional entries, together with some amendments and updates to entries in the 1987 volume. Copies can be obtained without charge from either of the above addresses.

Bulletin of Zoological Nomenclature — Crustacea and Mollusca Offprints

The International Trust for Zoological Nomenclature is offering a subscription for individual zoologists wishing to receive offprints of all cases in particular disciplines. For an annual payment of £15 or \$25 subscribers will receive copies of all Applications, Comments and Opinions relating to either the Crustacea or the Mollusca as soon as they are published in the *Bulletin of Zoological Nomenclature*. Offprints are available back to 1980.

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Back copies of all the volumes of the *Bulletin*, and of most volumes of the *Opinions and Declarations* that were published concurrently with vols. 1–16 of the *Bulletin*, are still available. Prices on application to I.T.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K.

Case 2806

***Zanclea costata* Gegenbaur, 1856 (Cnidaria, Hydrozoa): proposed conservation of both generic and specific names**

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Abstract. The purpose of this application is to conserve the generic and specific names of *Zanclea costata* Gegenbaur, 1856, familiar in the nomenclature of hydroids and hydromedusae. The names are threatened by the unused or seldom-used senior subjective synonyms *Acrochordium* Meyen, 1834, and *Mnestra* and *M. parasites*, both of Krohn (1853).

1. Meyen (1834, p. 165, pl. 28, fig. 8) established the new generic and specific names *Acrochordium album* for a hydroid found on pelagic *Sargassum natans* in the vicinity of the Azores. The generic name was considered to be a junior synonym of *Coryne* Gaertner, 1774 (p. 40) by J.L.R. Agassiz (1862, p. 185), Bedot (1905, p. 40) and Stechow (1923, p. 36). *Acrochordium* has not been used as valid since it was founded.

2. I re-examined the original description of *Acrochordium album* Meyen, 1834 and noted (Calder, 1988, p. 69) that it is a stolonal athecate hydroid with numerous capitate tentacles scattered over an elongate hydranth. Based on the description and illustrations provided by Meyen I concluded that it was congeneric with *Zanclea* Gegenbaur, 1856 (p. 229), rather than with *Coryne* Gaertner, 1774, and possibly conspecific with *Zanclea costata* Gegenbaur, 1856 (p. 229, pl. 8, fig. 4), the type species of *Zanclea* by monotypy. The name *Z. costata* was based on a medusa from the Mediterranean.

3. The infrequently used generic name *Mnestra* was established by Krohn (1853, p. 281) for the single species *Mnestra parasites* Krohn, 1853 (p. 281), also from the Mediterranean. This name was based on a medusa now known to have been deformed through parasitization by juvenile stages of the nudibranch mollusc *Phylliroe bucephala* Péron & Lesueur, 1810 (see Ankel, 1952, p. 118 and Rees, 1953, p. 219; Krohn thought, incorrectly, that the medusa was parasitic on the mollusc). Krohn's taxon is regarded as conspecific with *Zanclea costata* Gegenbaur, 1856 (see Rees, 1953, p. 221; Picard, 1957, p. 6; Martin & Brinckmann, 1963, p. 207; Bouillon, 1985, p. 121). Although valid under the Code, the name *Mnestra parasites* has always been used in the context of parasitized medusae. Both the generic name *Mnestra* and the specific name *parasites* have been unused as valid since Kramp (1961, p. 53) noted that *M. parasites* was 'probably identical' with *Zanclea costata*.

4. The generic name *Zanclea* Gegenbaur, 1856 has been extensively used in the nomenclature of both hydroids and hydromedusae for more than a century (see, for example, J.L.R. Agassiz, 1862, p. 344; Bouillon, 1985, p. 121; Calder, 1988, p. 69; His

Majesty the Showa Emperor Hirohito, 1988, p. 61; Petersen, 1990, p. 141). A representative list of five additional important works in which the name has been used, published between 1953–1991, is held by the Commission Secretariat (these works also include references to the widely used specific name *costata* Gegenbaur, 1856). The family name ZANCLEIDAE, established by Russell (1953, p. 98), is also currently in widespread use. Replacement of *Zanclea* with either of the little-known earlier subjective synonyms *Acrochordium* Meyen, 1834 or *Mnestra* Krohn, 1853 would cause considerable disturbance to hydrozoan nomenclature. I propose that the latter two names be suppressed.

5. Picard (1957, p. 6, footnote) recognized that the names *Mnestra* and *M. parasites*, both of Krohn (1853), had priority over *Zanclea* and *costata* but adopted Gegenbaur's (1856) names in the expectation that the Commission would not allow *Zanclea* and *costata* to be abandoned. However, Picard never submitted a case to the Commission to settle the matter.

6. In addition to *Mnestra parasites*, I have previously discussed (Calder, 1988, p. 70) three other possible senior subjective synonyms of *Zanclea costata*: *Acrochordium album* Meyen, 1834, *Coryne sessilis* Gosse, 1853 (p. 208, pl. 14, figs. 1–3) and *Tubularia implexa* Alder, 1856 (p. 439). The name *T. implexa* Alder (December 1856) is now known to have been published later than *Z. costata* Gegenbaur (July 1856); moreover, there is evidence suggesting that it is a different species (see Rees & Roa, 1966). Taxonomic questions remain about *Z. alba* (Meyen), *Z. sessilis* (Gosse) and *Z. implexa* (Alder), however, and the relationships of these three to *Z. costata* Gegenbaur are unsettled. In discussing the genus Petersen (1990, p. 141) concluded that 'the delimitation of *Zanclea* species is presently in a state of chaos'. Accordingly, I consider it inadvisable to request the suppression of specific names other than *parasites* in this case.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to suppress the following names for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:
 - (a) the generic names:
 - (i) *Acrochordium* Meyen, 1834;
 - (ii) *Mnestra* Krohn, 1853;
 - (b) the specific name *parasites* Krohn, 1853, as published in the binomen *Mnestra parasites*;
- (2) to place on the Official List of Generic Names in Zoology the name *Zanclea* Gegenbaur, 1856 (gender: feminine), type species by monotypy *Zanclea costata* Gegenbaur, 1856;
- (3) to place on the Official List of Specific Names in Zoology the name *costata* Gegenbaur, 1856 (specific name of the type species of *Zanclea* Gegenbaur, 1856);
- (4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the following names:
 - (a) *Acrochordium* Meyen, 1834, as suppressed in (1)(a)(i) above;
 - (b) *Mnestra* Krohn, 1853, as suppressed in (1)(a)(ii) above;
- (5) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *parasites* Krohn, 1853, as published in the binomen *Mnestra parasites* and as suppressed in (1)(b) above.

Acknowledgements

I am grateful to Dr P.F.S. Cornelius of The Natural History Museum, London for comments on an early draft of the manuscript, and to Mrs A. Gentry of the Commission Secretariat for help in the preparation of the application.

References

- Agassiz, J.L.R. 1862. *Contributions to the natural history of the United States of America*, vol. 4. 380 pp., pls. 20–35. Little, Brown & Co., Boston.
- Alder, J. 1856. Descriptions of three new British zoophytes. *Annals and Magazine of Natural History*, (2)18(108): 439–441.
- Ankel, W.E. 1952. *Phyllirrhoe bucephala* Pér. & Les. und die Meduse *Mnestra parasites* Krohn. *Pubblicazioni della Stazione Zoologica di Napoli*, 23(2–3): 91–140.
- Bedot, M. 1905. Matériaux pour servir à l'histoire des hydroïdes. 2me période (1821 à 1850). *Revue Suisse de Zoologie*, 13(1): 1–183.
- Bouillon, J. 1985. Essai de classification des hydropolypes-hydroméduses (Hydrozoa-Cnidaria). *Indo-Malayan Zoology*, 2(1): 29–243.
- Calder, D.R. 1988. Shallow-water hydroids of Bermuda: the Athecatae. *Life Sciences Contributions. Royal Ontario Museum*, 148: 1–107.
- Gaertner, J. 1774. Zoophyta. Quaedam Minuta. Pp. 34–41 in Pallas, P.S., *Spicilegium zoologicum quibus novae imprimis et obscurae animalium species...*, fasc. 10. 41 pp. Lange, Berolini.
- Gegenbaur, C. 1856. Versuch eines Systemes der Medusen, mit Beschreibung neuer oder wenig gekannter Formen; zugleich ein Beitrag zur Kenntniss der Fauna des Mittelmeeres. *Zeitschrift für Wissenschaftliche Zoologie*, 8(2): 202–273.
- Gosse, P.H. 1853. *A naturalist's rambles on the Devonshire coast*. xvi, 451 pp., 28 pls. Van Voorst, London.
- Hirohito, His Majesty the Showa Emperor. 1988. The hydroids of Sagami Bay. 179 pp., 4 pls. Biological Laboratory, Imperial Household, Tokyo.
- Kramp, P.L. 1961. Synopsis of the medusae of the world. *Journal of the Marine Biological Association of the United Kingdom*, 40: 1–469.
- Krohn, A. 1853. Ueber die Natur des kuppelförmigen Anhangs am Leibe von *Phyllirrhoe bucephala*. *Archiv für Naturgeschichte*, 19(1): 278–281.
- Martin, R. & Brinckmann, A. 1963. Zum Brutparasitismus von *Phyllirrhoe bucephala* Pér. & Les. (Gastropoda, Nudibranchia) auf der Meduse *Zanclus costata* Gegenb. (Hydrozoa, Anthomedusae). *Pubblicazioni della Stazione Zoologica di Napoli*, 33(3): 206–223.
- Meyen, F.J.F. 1834. Beiträge zur Zoologie, gesammelt auf einer Reise um die Erde. Funfte Abhandlung. Über das Leuchten des Meeres und Beschreibung einiger Polypen und anderer niederer Tiere. *Novorum Actorum Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum*, 16(Supplement 1): 125–216.
- Péron, F. & Lesueur, C.A. 1810. Histoire de la famille des mollusques Ptéropodes; caractères des dix genres qui doivent la composer. *Annales du Muséum d'Histoire Naturelle*, 15: 57–69.
- Petersen, K.W. 1990. Evolution and taxonomy in capitate hydroids and medusae (Cnidaria: Hydrozoa). *Zoological Journal of the Linnean Society*, 100(2): 101–231.
- Picard, J. 1957. Études sur les hydroïdes de la superfamille Pteronematoidea. 1. Généralités. *Bulletin de l'Institut Océanographique de Monaco*, 1106: 1–12.
- Rees, W.J. 1953. Note on *Phyllirrhoe bucephala* Péron and Lesueur and *Mnestra parasites* Krohn. *Proceedings of the Malacological Society of London*, 29: 219–221.
- Rees, W.J. & Roa, E. 1966. Asexual reproduction in the medusa *Zanclus implexa* (Alder). *Videnskabelige Meddelelser fra Dansk Naturhistorisk Forening*, 129: 39–41.
- Russell, F.S. 1953. *The medusae of the British Isles*. 530 pp. Cambridge University Press, Cambridge.
- Stechow, E. 1923. Zur Kenntnis der Hydroidenfauna des Mittelmeeres, Amerikas und anderer Gebiete. 11 Teil. *Zoologische Jahrbücher, Abteilung für Systematik, Ökologie und Geographie der Tiere*, 47(1–3): 29–270.

Case 2827

***Gebia major capensis* Krauss, 1843 (currently *Upogebia capensis*; Crustacea, Decapoda): proposed replacement of neotype, so conserving the usage of *capensis* and also that of *G. africana* Ortmann, 1894 (currently *Upogebia africana*)**

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Abstract. The purpose of this application is to conserve the accustomed usage of the specific names of two South African species of prawns: *Upogebia capensis* (Krauss, 1843) and *U. africana* (Ortmann, 1894). The latter species is commonly known as the mud-prawn or mud-shrimp. It is proposed to designate a replacement neotype for *capensis* from material of the species as presently understood; the previously designated neotype is a specimen of *africana*.

1. Three species of *Gebia* Leach, 1815 (p. 342; family UPOGEBIIDAE) were described from South Africa. *Gebia major* var. *capensis* Krauss, 1843 (p. 54) was originally described as a variety of *Gebia major* de Haan, [1841] (pl. 35, fig. 7; text (p. 165) published in [1849]; see Sherborn & Jentink (1895, p. 150) and Holthuis (1953, p. 37) for the dates of publication). The type material from Table Bay is now lost. The original description was short and by modern standards very incomplete and cannot be definitely reconciled with any single species known today. *G. subspinosus* Stimpson, 1860 (p. 22) was described from Simon's Bay; the fate of its type material is unknown. *G. africana* Ortmann, 1894 (p. 22, pl. 2, fig. 4) was described from Port Elizabeth. The holotype of this species is in the Zoological Museum, Strasbourg; it is a male without its abdomen (cephalothorax length 19.5 mm). Although in rather poor condition, it still shows the main characteristics of the species.

2. Since 1910 all three species have been referred to the genus *Upogebia* Leach, [1814] (pp. 386, 400; see Rathbun, 1897, p. 154, footnote for the date of publication). Until 1947 there was confusion between the three taxa and usually only one nominal species, *U. capensis*, was recognised (see, for example, Stebbing, 1900, p. 45; Stebbing, 1910; Balss, 1916, p. 34; Lenz & Strunck, 1914, p. 291; de Man, 1927, pp. 32–34; de Man, 1928, pp. 37, 41, 51). Barnard (1947, pp. 380, 381; 1950, pp. 514–520, fig. 96) revised the South African species of *Upogebia* and concluded that two species were involved: *U. capensis* (Krauss), characterised by a subdistal spine on the upper border of the merus of pereopod 1 and coxal spines on pereopods 1–3, and *U. africana* (Ortmann),

characterised by the absence of these spines. Stimpson's nominal species *Gebia subspinosa* was considered to be a synonym of *U. capensis* as the presence of coxal spines was mentioned in its original description.

3. Barnard's taxonomic arrangement has been generally adopted and at least 15 papers have been published since 1950 using his nomenclature. Besides agreeing on Barnard's morphological definition of the species, several authors have agreed on their ecological and geographical separation which is consistent with their type localities. There are no river outlets in Table Bay, and Krauss's material of *U. capensis* was therefore almost certainly from a marine rather than an estuarine habitat; the species is currently regarded as mainly marine to 80 metres depth, from southwestern and southern Africa between Lüderitz and Mossel Bay (Hill, 1981; Branch & Branch, 1981; Kensley, 1981). *U. africana* is estuarine to 18 metres depth mostly in eastern South Africa between Olifants River and Natal (Siegfried, 1962; Hill, 1977; Branch & Branch, 1981; Kensley, 1981; Hanekom, 1982; Martin & Baird, 1987; Hanekom & Erasmus, 1988; Zoutendyk & Bickerton, 1988). A further six references demonstrate this usage (Schaefer, 1970; Hill & Allanson, 1971; Ngoc-Ho, 1979, 1991; Emmerson, 1983; Atkinson & Taylor, 1988) and this is the usage in general marine biology texts in South Africa.

4. Sakai (1982, p. 44, fig. 9c, pls. A6, D5-6) selected a neotype for *Upogebia capensis* (Krauss, 1843) from material collected from Knysna, eastern South Africa by Hartmann in 1967, and originally identified as *africana* Ortmann, 1894 (see Hartmann-Schröder & Hartmann, 1974, p. 49). The specimen is a male, 55 mm in total length, housed in the Zoologisches Museum, Hamburg (catalogue no. ZMH 30877, selected from material originally registered as ZMH 29852). Sakai considered that *U. africana* was a junior synonym of *U. capensis*, and his selection of a neotype for *capensis* from material commonly assigned to *U. africana* in effect sank the latter name. The name *U. subspinosa* was revived by Sakai for what has been commonly called *U. capensis*, and the latter name was applied to *U. africana* (as defined by the holotype and as generally understood).

5. Sakai's (1982) selection of a neotype for *Upogebia capensis* has been ignored, probably not deliberately, by 10 authors in seven ecological papers since 1982 (see para. 3 above) and followed by only one (Holthuis, 1991, p. 233), who noted the unfortunate consequence that the name *capensis* has been transferred from one species to the other. The neotype upsets the nomenclature generally adopted since Barnard's (1947) and (1950) papers, and it came from material collected at the Knysna estuary (G. Hartmann, personal communication) which is not only far from Table Bay but is ecologically different and outside the geographical range of *Upogebia capensis* as generally understood (see Kensley, 1981, p. 31). In order to preserve the current usage of *Upogebia capensis* we propose that Sakai's (1982) neotype should be set aside and a replacement selected from material corresponding to the *U. capensis* of authors, collected in a marine environment, within the accepted geographical range and as close as practicable to the original type locality. The proposed replacement neotype, specimen no. 14895 in the South African Museum, Cape Town, was determined by K.H. Barnard as an ovigerous female with carapace length 22 mm and total length 65 mm; it is from Saldanha Bay, South Africa.

6. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to set aside the neotype designation of Sakai (1982) for *Gebia major capensis* Krauss, 1843 and to designate in its place specimen no.

14895 in the South African Museum, for which the data are given in para. 5 above;

- (2) to place the following names on the Official List of Specific Names in Zoology:
 - (a) *capensis* Krauss, 1843, as published in the trinomen *Gebia major* var. *capensis* and as defined by the neotype designated in (1) above;
 - (b) *africana* Ortmann, 1894, as published in the binomen *Gebia africana*.

Acknowledgements

We thank Prof L.B. Holthuis for comments on this proposal, and Dr G. Hartmann (Zoologische Museum, Hamburg) and Ms M. van der Merve (South African Museum) for the loan of material.

References

- Atkinson, R.J.A. & Taylor, A.C. 1988. Physiological ecology of burrowing decapods. *Symposia of the Zoological Society of London*, **59**: 201–226.
- Balss, H. 1916. Crustacea II: Decapoda Macrura and Anomura (ausser Fam. Paguridae). *Beiträge zur Kenntniss der Meeresfauna Westafrikas*, **2**(1): 11–46.
- Barnard, K.H. 1947. Descriptions of new species of South African decapod Crustacea, with notes on synonymy and new records. *Annals and Magazine of Natural History*, (11)**13**(102): 361–392.
- Barnard, K.H. 1950. Descriptive catalogue of South African decapod Crustacea (crabs and shrimps). *Annals of the South African Museum*, **38**: 1–837.
- Branch, G. & Branch, M. 1981. *The living shore of South Africa*. 272 pp., 60 pls., 388 figs. Struik, Cape Town.
- Emmerson, W.D. 1983. Tidal exchange of two decapod larvae *Palaemon pacificus* (Caridea) and *Upogebia africana* (Thalassinidea) between the Swartkops River estuary and adjacent coastal waters. *South African Journal of Zoology*, **18**(4): 326–330.
- Haan, W. de. [1841], [1849]. Crustacea. In Siebold, P.F. de, *Fauna Japonica, sive descriptio animalium, quae in itinere per Japoniam... annis 1823–1830 collegit*. Pls. 33–37, 39–42, 47 [1841]; pp. 165–243 [1849]. Lugduni-Batavorum.
- Hanekom, N.M. 1982. A study of two thalassinid prawns in the non-*Spartina* regions of the Swartkops estuary. *Occasional Bulletin of the Zoological Society of Southern Africa*, **2**: 99–100.
- Hanekom, N.M. & Erasmus, T. 1988. Variations in size compositions of populations of *Upogebia africana* (Ortmann) (Decapoda, Crustacea) within the Swartkops Estuary and possible influencing factors. *South African Journal of Zoology*, **23**(4): 259–265.
- Hartmann-Schröder, G. & Hartmann, G. 1974. Zur Kenntnis des Eulitorals der afrikanischen Westküste zwischen Angola und Kap der Guten Hoffnung und der afrikanischen Ostküste von Südafrika und Moçambique unter besonderer Berücksichtigung der Polychaeten und Ostracoden. *Mitteilungen aus dem Hamburgischen Zoologischen Museum und Institut*, **69** (Ergänzungsband): 1–514.
- Hill, B.J. 1977. The effect of heated effluent on egg production in the estuarine prawn *Upogebia africana* (Ortmann). *Journal of Experimental Marine Biology and Ecology*, **29**(3): 291–302.
- Hill, B.J. 1981. Respiratory adaptations of three species of *Upogebia* (Thalassinidea, Crustacea) with special reference to low tide periods. *Biological Bulletin, Marine Biological Laboratory Woods Hole*, **160**(2): 272–279.
- Hill, B.J. & Allanson, B.R. 1971. Temperature tolerance of the estuarine prawn *Upogebia africana*. *Marine Biology*, **11**(4): 337–343.
- Holthuis, L.B. 1953. On the dates of publication of W. de Haan's volume on the Crustacea of P.F. von Siebold's 'Fauna Japonica'. *Journal of the Society for the Bibliography of Natural History*, **3**(1): 36–47.

- Holthuis, L.B. 1991. FAO species catalogue. Vol. 13. Marine lobsters of the world. An annotated and illustrated catalogue of species of interest to fisheries known to date. *FAO Fisheries Synopsis*, **125**(13): 1–292.
- Kensley, B. 1981. On the zoogeography of southern African decapod Crustacea, with a distributional checklist of the species. *Smithsonian Contributions to Zoology*, **338**: 1–64.
- Krauss, F. 1843. *Die Südafrikanischen Crustaceen. Eine Zusammenstellung aller bekannten Malacostraca...* 68 pp., 4 pls. Schweizerbart, Stuttgart.
- Leach, W.E. [1813]–[1814]. Crustaceology. In: Brewster, D. (Ed.), *The Edinburgh Encyclopedia*, vol. 7. Part 1, pp. 383–384 [1813]; part 2, pp. 385–437 [1814].
- Leach, W.E. 1815. A tabular view of the external characters of four classes of animals, which Linné arranged under Insecta; with the distribution of genera composing three of these classes into orders, & c, and descriptions of several new genera and species. *Transactions of the Linnean Society of London*, **11**(2): 306–400.
- Lenz, H. & Strunk, K. 1914. Die Dekapoden der Deutschen Südpolar-Expedition 1901–1903. 1. Brachyuren und Macruren mit Ausschluss der Sergestiden. *Deutsche Südpolar-Expedition, Zoologie*, **15**(7,3): 257–345.
- Man, J.G. de. 1927. A contribution to the knowledge of twenty-one species of *Upogebia* Leach. *Capita Zoologica*, **2**(5): 1–58.
- Man, J.G. de. 1928. The Decapoda of the Siboga Expedition. Part 7. The Thalassinidae and Callianassidae collected by the Siboga-Expedition with some remarks on the Laomedidae. *Siboga-Expeditie*, **39a**(6): 1–187.
- Martin, A.P. & Baird, D. 1987. Seasonal abundance and distribution of birds on the Swartkops estuary, Port Elisabeth. *Ostrich*, **58**(3): 122–134.
- Ngoc-Ho, N. 1979. A taxonomic study of six species of *Upogebia* Leach (Crustacea, Decapoda, Thalassinidea) in the collections of the British Museum (Natural History), London. *Bulletin of the British Museum (Natural History)*, Zoology, **35**(2): 127–200.
- Ngoc-Ho, N. 1991. Sur quelques Callianassidae et Upogebiidae de la Nouvelle Calédonie (Crustacea, Thalassinidea). Pp. 281–311 in Richer de Forges, B. (Ed.), *Le benthos des fonds meubles de Nouvelle-Calédonie*, vol. 1. ORSTOM Editions, Paris.
- Ortmann, A. 1894. Crustaceen. Zoologische Forschungsreisen in Australien und dem Malayischen Archipel. *Denkschriften der Medicinisch-Naturwissenschaftlichen Gesellschaft zu Jena*, **8**: 3–80.
- Rathbun, M.J. 1897. Revision of nomenclature of the Brachyura. *Proceedings of the Biological Society of Washington*, **11**: 153–167.
- Sakai, K. 1982. Revision of Upogebiidae (Decapoda, Thalassinidea) in the Indo-West Pacific region. *Researches on Crustacea. The Carcinological Society of Japan*. Special Number, 1: 1–106.
- Schaefer, N. 1970. The functional morphology of the foregut of three species of decapod crustacea: *Cyclograpsus punctatus* (Milne-Edwards), *Diogenes brevisrostris* Stimpson, and *Upogebia africana* (Ortmann). *Zoologica Africana*, **5**(2): 309–326.
- Sherborn, C.D. & Jentink, F.A. 1895. On the dates of the parts of Siebold's 'Fauna Japonica' and Giebel's 'Allgemeine Zoologie' (first edition). *Proceedings of the Zoological Society of London*, **1895**: 149–150.
- Siegfried, W.R. 1962. A preliminary report on the biology of the mud-prawn *Upogebia africana* (Ortmann). *Investigational Report. Department of Nature Conservation*, **1**: 24.
- Stebbing, T.R.R. 1900. South African Crustacea. *Marine Investigations in South Africa*, **1**: 14–66.
- Stebbing, T.R.R. 1910. General catalogue of South African Crustacea. *Annals of the South African Museum*, **6**: 281–593.
- Stimpson, W. 1860. Prodomus descriptionis animalium evertibratorum, quae in Expeditione ad Oceanum Pacificum Septentrionalem, a Republica Federata missa, Cadwaladaro Ringgold et Johanne Rodgers Ducibus, observavit et descripsit. Pars VIII: Crustacea Macrura. *Proceedings of the Academy of Natural Sciences of Philadelphia*, **12**: 22–47.
- Zoutendyk, P. & Bickerton, I. 1988. Burrow identification of some estuarine organisms. *South African Journal of Zoology*, **23**(3): 235–238.

Case 2828***Podisus* Herrich-Schaeffer, 1851 (Insecta, Heteroptera): proposed conservation of *P. vittipennis* Herrich-Schaeffer, 1851 as the type species**

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Abstract. The purpose of this application is to conserve the name *Podisus* Herrich-Schaeffer, 1851 in its accustomed usage for a genus of predatory stink-bugs important as biological control agents. Kirkaldy's (1909) designation of *P. vittipennis* Herrich-Schaeffer, 1851 as the type species is preceded by Schouteden's (1907) designation of *P. punctipennis* Herrich-Schaeffer, 1851. The earlier designation would make *Podisus* a junior subjective synonym of *Apateticus* Dallas, 1851, and the genus as universally understood would be replaced by *Telepta* Stål, 1860, rejected as a junior synonym of *Podisus* for over 120 years.

1. In July 1851, Dallas (p. 105) established the genus *Apateticus* for a single new species *halys* (p. 105). This specific name is a synonym of the older name *Halys lineolata* Herrich-Schaeffer, 1840 (p. 69) giving the valid combination *Apateticus lineolatus* (Herrich-Schaeffer).

2. In November 1851, Herrich-Schaeffer (p. 296) established the genus *Podisus* for some previously described but unspecified species, plus five new ones which he named: *punctipennis* (p. 338), which is a junior synonym of *Apateticus lineolatus* (Herrich-Schaeffer, 1840); *strigipes* (p. 338), which has been transferred to *Perillus* Stål, 1862; *vittipennis* (p. 339); *pallipes* (p. 339); *albiseptus* (p. 339). No type species was designated.

3. Stål (1860, p. 10) proposed the nominal genus *Telepta* to contain six species but did not fix any of them as type species. Subsequently, Kirkaldy (1909, p. xviii) designated *T. crassimargo* Stål, 1860 as the type species of *Telepta*. Stål (1870, p. 49) himself placed *Telepta* in synonymy with *Podisus*.

4. Distant (1902, p. 254) stated that *lineolatus* was the type species of *Podisus*. However, this was not a valid type species designation under the modern Code, since *lineolatus* was not one of the nominal species originally included by Herrich-Schaeffer when he proposed *Podisus* and Distant did not cite the synonymy of *lineolatus* with any of the originally included nominal species.

5. Schouteden (1907, p. 70), presumably relying on the type species selection by Distant (1902) but not actually citing him, stated: 'D'ailleurs le type de *Podisus* et de *Apateticus* est le même et il fallait déjà nommer à nouveau le sous-genre *Podisus*

s. str. des auteurs antérieurs'. Schouteden noted that 'le type du genre (et sous-genre) *Apateticus* est *A. lineolatus* Herrich-Schaeffer (*Halys* Dallas)...'. In the list of species Schouteden cited the synonymy of *lineolatus* with *punctipennis* thereby, under Article 69a(v) of the Code, validly designating *punctipennis* as the type of *Podisus*. Schouteden recognized that *Podisus* thus became a synonym of the older name *Apateticus* Dallas, having synonymous type species. Schouteden (1907, p. 68) proposed a new genus *Eupodisus* to hold those species previously placed under *Podisus*, listing *Eupodisus* as a subgenus of *Apateticus* and placing *Telepta* Stål as a synonym of his new name. Schouteden (p. 70) designated *Apateticus modestus* Dallas, 1851 as type species of *Eupodisus*.

6. Kirkaldy (1909, p. xxviii) rejected Schouteden's arrangement and selected *Podisus vittipennis* Herrich-Schaeffer as type species of *Podisus*. Kirkaldy (p. 18) placed *Eupodisus* and *Telepta* as synonyms of *Podisus*, listing *Podisus* as a subgenus of *Apateticus*.

7. All subsequent workers have considered *Podisus* and *Apateticus* as separate genera. Since Schouteden (1907) and Kirkaldy (1909), none of the species listed by them under the genus-group names *Podisus* or *Eupodisus* has appeared in the primary literature in combination with *Apateticus*, *Telepta*, *Eupodisus* or any genus-group name other than *Podisus*. In one instance the combination *Apateticus* (*Eupodisus*) *mellipes* (Bergroth, 1891) appeared in a book on Brazilian insects (Costa-Lima, 1940, p. 49). This single usage may be sufficient to prevent *Eupodisus* Schouteden, 1907 from being thought of as an unused name, but it is still a junior subjective synonym of *Telepta* Stål, 1860. The generic name *Podisus* is well established in the ecological literature since it contains several ecologically important species. For example, McPherson (1980) provided a bibliography of 74 published articles on the prey of just one species, *Podisus maculiventris* Say, 1831. A list of a further 20 recent publications on *Podisus* is held by the Commission Secretariat.

8. If Schouteden's validation of Distant's selection of *Apateticus lineolatus* (= *Podisus punctipennis*) is allowed to stand, then the genus long known as *Podisus* would be called *Telepta*, a name which has not been used since it was proposed in 1860 and put into synonymy by Stål in 1870.

9. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to set aside all fixations of type species for the nominal genus *Podisus* Herrich-Schaeffer, 1851 prior to the designation by Kirkaldy (1909) of *Podisus vittipennis* Herrich-Schaeffer, 1851;
- (2) to place on the Official List of Generic Names in Zoology the name *Podisus* Herrich-Schaeffer, 1851 (gender: masculine), type species by subsequent designation by Kirkaldy (1909) *Podisus vittipennis* Herrich-Schaeffer, 1851;
- (3) to place on the Official List of Specific Names in Zoology the name *vittipennis* Herrich-Schaeffer, 1851, as published in the binomen *Podisus vittipennis* (specific name of the type species of *Podisus* Herrich-Schaeffer, 1851).

References

- Costa Lima, A.D. 1940. *Insetos do Brasil*, vol. 2, capítulo xxii. Hemipteros. 351 pp. Escola Nacional de Agronomia, Rio de Janeiro.

- Dallas, W.S.** 1851. *List of the specimens of hemipterous insects in the collection of the British Museum*, part 1. 364 pp. British Museum, London.
- Distant, W.L.** 1902. *The fauna of British India, including Ceylon and Burma. Rhynchota*, vol. 1 (Heteroptera). 438 pp. Secretary of State for India, London.
- Herrich-Schaeffer, G.A.W.** 1840. Pp. 61–108 in: *Die wanzenartigen Insecten*, vol. 5, part 2. Zeh'schen Buchhandlung, Nürnberg.
- Herrich-Schaeffer, G.A.W.** 1851. Pp. 257–348 in: *Die wanzenartigen Insecten*, vol. 9, part 6. Lotzbeck, Nürnberg.
- Kirkaldy, G.W.** 1909. *Catalogue of the Hemiptera (Heteroptera)*, vol. 1 (Cimicidae). xl, 392 pp. Dames, Berlin.
- McPherson, J.E.** 1980. A list of the prey species of *Podisus maculiventris* (Hemiptera: Pentatomidae). *Great Lakes Entomologist*, **13**: 17–24.
- Schouteden, H.** 1907. Heteroptera, fam. Pentatomidae, subfam. Asopinae (Amyoteinae). In Wytsman, P.A.G. (Ed.), *Genera Insectorum*, part 52. 82 pp. Wytsman, Bruxelles.
- Stål, C.** 1860. Bidrag till Rio Janeiro-traktens, hemipter-fauna. *Kongliga Svenska Vetenskaps-Akademiens Handlingar*, **2**(7): 1–84.
- Stål, C.** 1870. Enumeratio Hemipterorum. *Kongliga Svenska Vetenskaps-Akademiens Handlingar*, **9**(1): 1–232.

Case 2795**ANTHRIBIDAE Billberg, 1820 (Insecta, Coleoptera): proposed precedence over CHORAGIDAE Kirby, 1819**

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Abstract. The purpose of this application is to conserve the well known beetle family name ANTHRIBIDAE Billberg, 1820 (type genus *Anthribus* Geoffroy, 1762) by giving it precedence over CHORAGIDAE Kirby, 1819 (type genus *Choragus* Kirby, 1819).

1. The genus *Choragus* and family CHORAGIDAE were introduced by Kirby (1819, p. 447) for the single species *C. sheppardi* (p. 448).

2. The name ANTHRIBIDAE was introduced by Billberg (1820, p. 39, as Anthribides). The type genus is *Anthribus*; the history of this name has been discussed by Kerzhner (BZN 48: 118), who has proposed that it be conserved with the authorship of Geoffroy (1762, p. 306). I support Kerzhner's proposals and, on the assumption that they will be accepted by the Commission, I do not suggest below any action concerning *Anthribus* or the name of its type species (see proposals (1)(c), (6)(c) and (9)(h) on BZN 48: 126, 127 and 129). Nominal species were first included in *Anthribus* by Forster (1770), and *A. fasciatus* Forster, 1770 (p. 5) was designated as type species by Jordan (1931, p. 287).

3. The family name ANTHRIBIDAE has been used in numerous works, relating to all parts of the world. CHORAGINAE has been used occasionally at subfamily rank within the ANTHRIBIDAE, but so far as I know never for a family-group taxon containing *Anthribus*, even when its priority over ANTHRIBIDAE has been acknowledged (see Holloway, 1982, p. 14). A change of the well established usage would only cause confusion. A list of 11 representative works to illustrate the usage of ANTHRIBIDAE has been given to the Commission Secretariat.

4. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to rule that the family-group name ANTHRIBIDAE Billberg, 1820 is to be given precedence over the name CHORAGIDAE Kirby, 1819;
- (2) to place on the Official List of Generic Names in Zoology the name *Choragus* Kirby, 1819 (gender: masculine), type species by monotypy *Choragus sheppardi* Kirby, 1819;
- (3) to place on the Official List of Specific Names in Zoology the name *sheppardi* Kirby, 1819, as published in the binomen *Choragus sheppardi* (specific name of the type species of *Choragus* Kirby, 1819);
- (4) to place on the Official List of Family-Group Names in Zoology the following names:
 - (a) ANTHRIBIDAE Billberg, 1820 (type genus *Anthribus* Geoffroy, 1762), with the endorsement that it and other family-group names based on *Anthribus* are to be given precedence over those based on *Choragus* Kirby, 1819;

- (b) CHORAGIDAE Kirby, 1819 (type genus *Choragus* Kirby, 1819), with the endorsement that it and other family-group names based on *Choragus* are not to be given priority over those based on *Anthribus* Geoffroy, 1762.

References

- Billberg, G.J.** 1820. *Enumeratio Insectorum in Museo Gust. Joh. Billberg*. ii, 138 pp. Gadelianis, Stockholm.
- Forster, J.R.** 1770. *A catalogue of British insects*. 16 pp. Eyres, Warrington.
- Geoffroy, E.L.** 1762. *Histoire abrégée des insectes qui se trouvent aux environs de Paris*. Vol. 1, xxviii, 523 pp. Durand, Paris.
- Holloway, B.A.** 1982. Anthribidae (Insecta: Coleoptera). *Fauna of New Zealand*, no. 3. 264 pp. DSIR, Wellington.
- Jordan, K.** 1931. Anthribidae versus Platystomidae. *Novitates Zoologicae*, **36**: 281–287.
- Kirby, W.** 1819. A century of insects, including several new genera described from his cabinet. *Transactions of the Linnean Society of London*, **12**: 375–482.

Case 2811***Catocala connubialis* Guenée, 1852 (Insecta, Lepidoptera): proposed conservation of the specific name**

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Abstract. The purpose of this application is to conserve the specific name of the Connubial Underwing moth *Catocala connubialis* Guenée, 1852. This name is threatened by its unused senior synonym *Phalaena amasia* Smith, 1797 which was long thought to be invalid as a junior secondary homonym of *Catocala amasia* (Esper). However, it is now known that Esper's name was not published until 1804. Smith's name *amasia* is therefore available and it is now proposed that it be suppressed.

1. In 1797, J.E. Smith (p. 179) described and named as *Phalaena amasia* a new species of *Catocala* Schrank, 1802 from Virginia and Georgia. He figured two specimens on pl. xc, a male (upper right) and a female (lower left), stating: 'In this species the sexes differ more than usual in the colour of their upper wings. From the beautiful male our character is taken, according to general custom in insects as well as birds; but it applies also to the female as much as possible'. Early Nearctic *Catocala* workers recognized that the two specimens figured as *amasia* were not conspecific. The name *amasia* was subsequently restricted to the male upon which Smith had based his diagnosis. Smith's figured female was referred to *Catocala similis* Edwards, 1864 (see Grote & Robinson, 1866; Hulst, 1884; Smith, 1893; Dyar, 1903).

2. At the close of the 18th century, in *Die Schmetterlinge in Abbildungen...*, Esper described a *Catocala* species from Turkey as *Noctua amasia*. Throughout the 19th and 20th century literature the date of Esper's work was cited as 1796 (see Hampson, 1913, p. 115; Nye, 1975, p. 198); Sherborn & Woodward (1901, p. 139) accepted this date. Only recently has it been shown (Heppner, 1981, p. 253) that both the text (Theil 4, Band 2, Abschnitt 2, p. 55) and illustrations (Theil 4, Band 2, Abschnitt 1, pl. 194, figs. 1-2) comprising the description of *amasia* Esper were in fact not published until 1804.

3. In his catalogue of the NOCTUIDAE, Hampson (1913) placed *amasia* Esper as a synonym of *Phalaena puerpera* Giorna, 1791 (p. 104), and *amasia* Smith as a species in the genus *Ephesia* Hübner, 1818 (p. 11). In the Seitz volumes, Warren (1914) followed Hampson's treatment of these two taxa.

4. In their revision of the Nearctic *Catocala*, Barnes & McDunnough (1918, p. 17) showed that Hampson's division of *Catocala* into separate genera on the basis of adult leg spination was without merit, and placed *Ephesia* and Hampson's other genera as synonyms of *Catocala*. Nearctic workers (e.g. McDunnough, 1938; Forbes, 1954; Sargent, 1976; Hodges, 1983; Covell, 1984) have universally followed Barnes & McDunnough's generic treatment; indeed, *Catocala* is the only genus used by most Nearctic workers since the latter part of the 19th century. In the post-Hampson

Palaearctic literature, *Ephesia* was treated as a valid genus by some authors (e.g. Draudt, 1939; Forster & Wohlfahrt, 1971) or subgenus (Agenjo, 1959). However, more recent Palaearctic workers (e.g. Martin, 1980; Inouye et al., 1982; Sugi et al., 1987) have treated *Ephesia* as a synonym of *Catocala*. Poole, in his *Catalogue of the World Noctuidae* (1989), transferred to *Catocala* all taxa originally described in *Ephesia* and the other Hampsonian genera.

5. Beutenmüller (1907, p. 146) was apparently the first Nearctic worker to address the secondary homonymy involving *amasia* that occurs by treating *Catocala* as the only valid generic name. He resolved this homonymy by citing *amasia* Smith, 1797 as preoccupied by *amasia* Esper which he thought to date from 1786. He then placed *Catocala amasia* Smith under the synonymy of *Catocala cordelia* Edwards, 1880 (p. 59). Barnes & McDunnough (1917, 1918) followed Beutenmüller's taxonomic treatment, differing only in dating *amasia* Esper to 1796. McDunnough (1938, p. 118) later moved *cordelia* to the synonymy of *Catocala connubialis* Guenée, 1852 (p. 105), and it is now widely recognized that *cordelia* and *amasia* were names given to a morph that can be bred from *connubialis* females (and vice versa).

6. Since 1938 *connubialis* Guenée has appeared exclusively as the specific name in the Nearctic *Catocala* literature. The name has been used in the two subsequent descriptions of new forms for the species (Brower, 1940; Muller, 1960) and other taxonomic works on *Catocala* (Gall & Hawks, 1990); a book devoted to *Catocala* (Sargent, 1976); three principal monographs and catalogues treating moths (Forbes, 1954; Hodges, 1983; Poole, 1989); a field guide to moths (Covell, 1984); regional faunistic treatments (Tietz, 1952; Ferguson, 1953; Kimball, 1965; Brower, 1974; Nelson & Loy, 1983); the experimental zoological literature (Sargent, 1974; Sargent & Owen, 1975; Gall, 1991); and throughout numerous shorter reports on *Catocala* distributions and life histories including the annual *Season Summaries* of the Lepidopterists' Society. Hodges's (1983) list cites '*amasia* (J.E. Smith, 1797), part' under the synonymy of *Catocala similis*, but omits *amasia* from the synonymy of *connubialis*, and Poole's (1989) catalogue fails to mention J.E. Smith's name. The original edition (Holland, 1903) of the *Moth Book* treated *amasia* Smith as a valid nominal species, and several reprintings during the first half of the 20th century retained the old 1903 taxonomy. Hence, the reprinted *Moth Book* fell badly out of step with taxonomic treatments reported in the literature, as was acknowledged in the prefaces and introductions to later volumes. Only in 1968, when Holland's tome was republished with taxonomic emendations by A.E. Brower, was the name *connubialis* Guenée finally substituted for *amasia* Smith. Nevertheless, it is clear that the *Moth Book* reprintings had no significant impact on the already long accepted usage of the name *connubialis*.

7. As outlined above, the name *amasia* Smith, 1797 has since the works of Beutenmüller (1907) and Barnes & McDunnough (1917, 1918) been erroneously treated as a junior, rather than senior, secondary homonym of *amasia* Esper in the genus *Catocala*. To reintroduce *amasia* Smith as a senior synonym of *connubialis* Guenée, 1852 would upset long-standing nomenclatural usage.

8. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to suppress the specific name *amasia* Smith, 1797, as published in the binomen *Phalaena amasia*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;

- (2) to place on the Official List of Specific Names in Zoology the name *connubialis* Guenée, 1852, as published in the binomen *Catocala connubialis*;
- (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *amasia* Smith, 1797, as published in the binomen *Phalaena amasia* and as suppressed in (1) above.

References

- Agénjo, R. 1959. Las *Catocala* Schr., 1802, españolas, con más amplias consideraciones respecto a las de mayor interés forestal (Lep. Noct.). *Eos* (Madrid), **35**: 301–384.
- Barnes, W. & McDunnough, J. 1917. *Check list of the Lepidoptera of boreal America*. 392 pp. Herald Press, Decatur.
- Barnes, W. & McDunnough, J. 1918. Illustrations of the North American species of the genus *Catocala*. *Memoirs of the American Museum of Natural History*, (2)**3**: 1–47.
- Beutenmüller, W. 1907. Notes on and descriptions of new forms of *Catocala*. *Bulletin of the American Museum of Natural History*, **23**: 145–151.
- Brower, A.E. 1940. Descriptions of some new Macrolepidoptera from eastern America. *Bulletin of the Brooklyn Entomological Society*, **35**: 138–140.
- Brower, A.E. 1974. A list of the Lepidoptera of Maine — Part 1, the Macrolepidoptera. *University of Maine (Orono) Life Sciences and Agricultural Experiment Station Technical Bulletin*, **66**: 1–136.
- Covell, C.V. 1984. *A field guide to the moths of eastern North America*. 496 pp. Houghton Mifflin, Boston.
- Dyar, H.G. 1903. *A list of North American Lepidoptera and key to the literature of this order of insects*. 723 pp. Government Printing Office, Washington.
- Edwards, H. 1880. Notes upon the genus *Catocala*, with descriptions of new varieties and species. *Bulletin of the Brooklyn Entomological Society*, **3**: 53–62.
- Edwards, W.H. 1864. Descriptions of certain species of *Catocala*, found within the United States. *Proceedings of the Entomological Society of Philadelphia*, **2**: 508–512.
- Esper, E.J.C. [1804]a. *Die Schmetterlinge in Abbildungen nach der Natur mit Beschreibungen*. Theil 4 (Die Eulenphalenen). Band 2. Abschnitt 1. Pp. 373–698, pls. 184–198. Walthers, Erlangen.
- Esper, E.J.C. [1804]b. *Die Schmetterlinge in Abbildungen nach der Natur mit Beschreibungen*. Theil 4 (Die Eulenphalenen). Band 2. Abschnitt 2. Pp. 1–85. Walthers, Erlangen.
- Ferguson, D.C. 1953. The Lepidoptera of Nova Scotia: part 1, Macrolepidoptera. *Proceedings of the Nova Scotian Institute of Science*, **23**: 1–375.
- Forbes, W.T.M. 1954. Lepidoptera of New York and neighboring states. III. Noctuidae. *Memoirs of the Cornell University Agricultural Experiment Station*, **329**: 1–433.
- Forster, W. & Wohlfahrt, T.A. 1971. *Die Schmetterlinge Mitteleuropas*, vol. 4 (Eulen, Noctuidae). 329 pp. Keller, Stuttgart.
- Gall, L.F. 1991. Evolutionary ecology of sympatric *Catocala* moths (Lepidoptera: Noctuidae). III. Experiments on female oviposition preference. *Journal of Research on the Lepidoptera*, **29**: 217–233.
- Gall, L.F. & Hawks, D.C. 1990. Systematics of moths in the genus *Catocala* (Lepidoptera: Noctuidae). I. Type material in the Strecker collection, with lectotype designations. *Fieldiana (Zoology)*, (2)**59**: 1–16.
- Giorna, M.E. 1791. *Calendario entomologico, ossia osservazioni sulla stagioni proprie agl' insetti nel clima Piemontese, e particolarmente ne' contorni di Torino*. 146 pp. Torino.
- Grote, A.R. & Robinson, C.T. 1866. Lepidopterological notes and descriptions, no. 2. *Proceedings of the Entomological Society of Philadelphia*, **6**: 1–30.
- Guenée, A. 1852. *Histoire naturelle des insectes. Species général des Lépidoptères*, vol. 7 (Noctuelites), part 3. 441 pp. Roret, Paris.
- Hampson, G.F. 1913. *Catalogue of the Lepidoptera Phalaenae in the British Museum*, vol. 12. 626 pp. British Museum, London.

- Heppner, J.B. 1981. The dates of E.J.C. Esper's *Die Schmetterlinge in Abbildungen... 1776-1830*. *Archives of Natural History*, **10**: 251-254.
- Hodges, R.W. 1983. *Check list of the Lepidoptera of America north of Mexico*. 284 pp. University Press, Cambridge.
- Holland, W.J. 1903. *The moth book*. 479 pp. Doubleday, Page & Co., New York.
- Holland, W.J. 1968. *The moth book* (unabridged republication of the 1903 Doubleday edition, with annotations and foreword by A. E. Brower). 479 pp. Dover, New York.
- Hübner, J. 1818. *Zuträge zur Sammlung exotischer Schmettlinge, bestehend in Bekundigung einzelner Fliegmuster neuer oder rarer nichteuropäischer Gattungen. Erstes Hundert*. 40 pp., 35 pls., figs. 1-200 (plates published [1808-1818]). Augsburg.
- Hulst, G.D. 1884. The genus *Catocala*. *Bulletin of the Brooklyn Entomological Society*, **3**: 14-56.
- Inouye, H., Sugi, S., Kuroko, H., Moriuti, S. & Kawabe, A. 1982. *Moths of Japan*, vol. 2. 552 pp. Kodansha, Tokyo.
- Kimball, C.P. 1965. *The Lepidoptera of Florida: an annotated checklist*. 363 pp. State of Florida Department of Agriculture, Gainesville.
- Martin, M. 1980. [On the morphology of the genitalia of genera *Mormonia* Hb., *Catocala* Schrk., and *Ephesia* Hb. (Lepidoptera, Noctuidae)]. *Uchenye Zapiski Tartuskogo Gosudarstvennogo Universiteta*, **13**(516): 36-53. [In Russian.]
- McDunnough, J. 1938. Check list of the Lepidoptera of Canada and the United States of America. Part 1. Macrolepidoptera. *Memoirs of the Southern California Academy of Sciences*, **1**: 1-272.
- Muller, J. 1960. A new melanic form of *Catocala commubialis* from New Jersey (Noctuidae). *Journal of the Lepidopterists' Society*, **14**: 177.
- Nelson, J.M. & Loy, P.W. 1983. The Underwing Moths (Lepidoptera: Noctuidae) of Oklahoma. *Proceedings of the Oklahoma Academy of Science*, **63**: 60-67.
- Nye, I.W.B. 1975. *The generic names of moths of the world*, vol. 1 (Noctuidae (part): Noctuidae, Agaristidae, and Nolidae). 568 pp. British Museum (Natural History), London.
- Poole, R.W. 1989. Noctuidae, part 3. *Lepidopterorum Catalogus*, (2)**118**: 1015-1314.
- Sargent, T.D. 1974. Melanism in moths of central Massachusetts (Noctuidae, Geometridae). *Journal of the Lepidopterists' Society*, **28**: 145-152.
- Sargent, T.D. 1976. *Legion of night: the Underwing Moths*. 222 pp. University of Massachusetts Press, Amherst.
- Sargent, T.D. & Owen, D.F. 1975. Apparent stability in hindwing diversity in samples of moths of varying species composition. *Oikos*, **26**: 205-210.
- Schrank, F.P. 1802. *Fauna Bioica. Durchgedachte Geschichte der in Baiern einheimischen und zahmen Thiere*, vol. 2. 173 pp. Krull, Ingolstadt.
- Sherborn, C.D. & Woodward, B.B. 1901. The dates of Esper's 'Schmetterlinge'. *Annals and Magazine of Natural History*, (7)**7**(37): 137-140.
- Smith, J.B. 1893. A catalogue, bibliographical and synonymical, of the species of moths of the lepidopterous superfamily Noctuidae, found in boreal America. *Bulletin of the United States National Museum*, **44**: 1-424.
- Smith, J.E. 1797. *The natural history of the rarer lepidopterous insects of Georgia including their systematic characters, the particulars of their several metamorphoses, and the plants on which they feed. Collected from the observations of Mr. John Abbot many years resident in that country*, vol. 2. Pp. 101-214, pls. 51-104. Bensley, London.
- Sugi, S., Yamamoto, M., Nakatomi, K., Sato, R., Nakajima, H. & Owada, M. 1987. *Larvae of the larger moths in Japan*. 453 pp. Kodansha, Tokyo.
- Tietz, H.M. 1952. *The Lepidoptera of Pennsylvania*. 194 pp. Pennsylvania Agricultural Experiment Station, Pennsylvania State College of Agriculture.
- Warren, W. 1914. Subfamily *Catocalinae*, pp. 301-444 in: Seitz, A. (Ed.) *The Macrolepidoptera of the world*. Section I: The Macrolepidoptera of the Palearctic Region. Tome III: Noctuidiform Phalaenae. Kernen, Stuttgart.

Case 2793**METOPIINAE Foerster, 1868 (Insecta, Hymenoptera), METOPIINI Raffray, 1904 (Insecta, Coleoptera), and METOPIINI Townsend, 1908 (Insecta, Diptera): proposed removal of homonymy**

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Abstract. The purpose of this application is to avoid homonymous family-group names in three orders of Insecta. It is proposed that the complete generic names of *Metopias* Gory, 1832 and *Metopia* Meigen, 1803 be adopted as the stems for the corresponding family-group names, giving METOPIASINI Raffray, 1904 (Coleoptera) and METOPIAINI Townsend, 1908 (Diptera). The subfamily name METOPIINAE Foerster, 1868 (Hymenoptera) based on *Metopius* Panzer, 1806 would remain unchanged.

1. Family-group names based on the stem METOPI- are in use in three orders of Insecta: METOPIINAE Foerster, 1868 (Hymenoptera, ICHNEUMONIDAE), METOPIINI Raffray, 1904 (Coleoptera, PSELAPHIDAE) and METOPIINI Townsend, 1908 (Diptera, SARCOPHAGIDAE). All three names are cited by Handlirsch (1925, p. 578 (Coleoptera), p. 738 (Hymenoptera), p. 1025 (Diptera)), but the homonymy has never been confronted. The three names are based on non-homonymous generic names having identical stems. In accordance with Article 55b of the Code this case is referred to the Commission.

2. The name 'Metopioidea' was first used by Foerster (1868, pp. 142, 159) for a family of ichneumons, based on *Metopius* Panzer, 1806 (p. 78). This name is in general use as the subfamily METOPIINAE. Some recent uses in major works are: Townes & Townes (1959, p. 3), Townes (1971, p. 89), Fitton & Gauld (1976, p. 254), Krombein et al. (1979, p. 547) and Fitton (1984, p. 353). The METOPIINAE are a world-wide group of over 500 species, all parasitic on Lepidoptera (Townes & Townes, 1959; Fitton, 1984). The type species of *Metopius*, *Sphex vespoides* Scopoli, 1763 (p. 296), was designated by Viereck (1912, p. 176).

3. The name METOPIINI Raffray (1904, p. 106), based on *Metopias* Gory, 1832 (pl. 42; type species by monotypy *Metopias curculionoides* Gory, 1832), was proposed for a tribe of PSELAPHIDAE (Coleoptera). This name has been in general use, including the following works: Raffray (1908, p. 186; 1911, p. 76), Park (1942, p. 204; 1951, pp. 61, 62; 1952, pp. 13, 14), Comellini (1983, p. 437) and Newton & Chandler (1989, p. 41). Jeannel (1949, p. 42; 1955, p. 8) used the spelling METOPIASINI without explanation, attributing the name to Raffray. *Metopias* has been used from the start as masculine.

As a masculine Greek noun ending in *-as* it has the stem *METOP-* (Code, p. 209, Appendix D) so Jeannel's spelling is incorrect, although we recommend its adoption (see below). The *METOPINI* Raffray are a small Neotropical group of about 40 species of no known economic importance.

4. The name *METOPINI* was proposed by Townsend (1908, p. 64) for a tribe of Diptera, implicitly based on *Metopia* Meigen, 1803 (p. 280). This name has been commonly used for a tribe of *SARCOPHAGIDAE*, subfamily *MILTOGRAMMATINAE*, for instance by Rohdendorf (1935, p. 95; 1967, p. 66), Lopes et al. (1977, p. 560), Verves (1986, p. 88; 1989, p. 117) and Lopes (1989, p. 723), although other authors have avoided any subdivisions of the *MILTOGRAMMATINAE* (e.g. Downes, 1965, p. 936; Shewell, 1987, p. 1185 and Pape 1987, p. 27). The sarcophagid *METOPINI* are widespread in all zoogeographical regions but with greatest diversity in the Palearctic. The biology of the more than 100 species is poorly known, but several are kleptoparasites in nests of sphecids wasps and solitary bees (Ferrari, 1987). The type species of *Metopia* is by monotypy *Musca leucocephala* 'Panzer' (i.e. Rossi, 1790, p. 306), a senior subjective synonym of *Tachina argyrocephala* Meigen, 1824 (p. 372; see Stein, 1900, p. 132) but a junior primary homonym of *Musca leucocephala* de Villers, 1789. Brauer (1893, p. 503) invalidly gave *T. argyrocephala* as the type species.

5. Of the three homonymous family-group names discussed above, *METOPINAE* Foerster, 1868 in the Hymenoptera is the oldest, has been in the most widespread use, and applies to the largest and most highly-ranked group. It therefore seems advisable to allow this name to stand as valid.

6. *METOPINI* Raffray, 1904 in the Coleoptera is also in general use and has no available synonyms (Newton & Chandler, 1989). In our opinion the best course would be to emend the stem of the type genus to remove the homonymy with *METOPINAE* Foerster and establish a family-group name recognizably based on *Metopias*.

7. *METOPINI* Townsend, 1908 in the Diptera has been divided into several subtribes (Rohdendorf, 1967, p. 66; Verves, 1989, p. 177); the next oldest name among these could be used as a replacement tribal name. If, in accordance with Verves's (1989) concept, a subtribe is recognized with only *Metopia* included, it would still need a name. In our opinion, the best course again would be to emend the stem of the type genus to remove the homonymy with *METOPINAE* Foerster and establish a family-group name clearly based on *Metopia*.

8. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers:

(a) to rule that for the purposes of Article 29 the stem of the generic name *Metopia* Meigen, 1803 is *METOP-*;

(b) to rule that for the purposes of Article 29 the stem of the generic name *Metopias* Gory, 1832 is *METOP-*;

(2) to place the following names on the Official List of Generic Names in Zoology:

(a) *Metopia* Meigen, 1803 (gender: feminine), type species by monotypy *Musca leucocephala* Rossi, 1790 (a senior subjective synonym of *Tachina argyrocephala* Meigen, 1824 but a junior primary homonym of *Musca leucocephala* de Villers, 1789);

(b) *Metopias* Gory, 1832 (gender: masculine), type species by monotypy *Metopias curculionoides* Gory, 1832;

- (c) *Metopius* Panzer, 1806 (gender: masculine), type species by subsequent designation by Viereck (1912) *Sphex vespoides* Scopoli, 1763;
- (3) to place the following names on the Official List of Specific Names in Zoology:
 - (a) *argyrocephala* Meigen, 1824, as published in the binomen *Tachina argyrocephala* (valid subjective synonym of the specific name of *Musca leucocephala* Rossi, 1790, the type species of *Metopia* Meigen, 1803);
 - (b) *curculionoides* Gory, 1832, as published in the binomen *Metopias curculionoides* (specific name of the type species of *Metopias* Gory, 1832);
 - (c) *vespoides* Scopoli, 1763, as published in the binomen *Sphex vespoides* (specific name of the type species of *Metopius* Panzer, 1806);
- (4) to place the following names on the Official List of Family-Group Names in Zoology:
 - (a) METOPIAINI Townsend, 1908, type genus *Metopia* Meigen, 1803 (spelling emended in (1)(a) above) (Insecta, Diptera);
 - (b) METOPIASINI Raffray, 1904, type genus *Metopias* Gory, 1832 (spelling emended in (1)(b) above) (Insecta, Coleoptera);
 - (c) METOPIINAE Foerster, 1868, type genus *Metopius* Panzer, 1806 (Insecta, Hymenoptera);
- (5) to place the following names on the Official Index of Rejected and Invalid Family-Group Names in Zoology:
 - (a) METOPIINI Townsend, 1908 (spelling emended to METOPIAINI in (1)(a) above);
 - (b) METOPHINI Raffray, 1904 (spelling emended to METOPIASINI in (1)(b) above).

Acknowledgement

We thank Dr C.W. Sabrosky for providing helpful discussion and references regarding usage of METOPIINI in Diptera, and for establishing communication between M.K.T./A.F.N. and T.P.

References

- Brauer, F. 1893. Vorarbeiten zu einer Monographie der *Muscaria Schizometopa* (exclusive *Anthomyidae*). *Verhandlungen der Kaiserlich-Königlichen Zoologisch-Botanischen Gesellschaft in Wien*, **43**: 447–525.
- Comellini, A. 1983. Notes sur les Psélaphides néotropicaux (Coleoptera). 4- Le genre *Metopioxys* de la tribu des Metopiini. *Revue Suisse de Zoologie*, **90**: 437–456.
- Downes, W. L., Jr. 1965. Family Sarcophagidae. Pp. 933–961 in Stone, A., Sabrosky, C.W., Wirth, W.W., Foote, R.H. & Coulson, J.R. (Eds.), *A catalog of the Diptera of America north of Mexico*. iv, 1696 pp. United States Department of Agriculture, Washington.
- Ferrar, P. 1987. A guide to the breeding habits and immature stages of Diptera Cyclorrhapha. *Entomograph*, **8**: 1–907.
- Fitton, M.G. 1984. Subfamily Metopiinae. Pp. 353–363 in Gauld, I.D. (Ed.), *An introduction to the Ichneumonidae of Australia*. 413 pp. British Museum (Natural History), London.
- Fitton, M.G. & Gauld, I.D. 1976. The family-group names of the Ichneumonidae (excluding Ichneumoninae) (Hymenoptera). *Systematic Entomology*, **1**: 247–258.
- Foerster, A. 1868. Synopsis der Familien und Gattungen der Ichneumonen. *Verhandlungen des Naturhistorischen Vereines der Preussischen Rheinlande und Westphalens*, **25**: 135–221.
- Gory, H.L. 1832. *Metopias*. *Metopias*. Gory. *Magasin de Zoologie*, **2**: pl. 42 [2 pp. text, 1 pl.].
- Handlirsch, A. 1925. Systematische Übersicht. Pp. 377–1140 in Schröder, C. (Ed.), *Handbuch der Entomologie*, vol. 3. (Geschichte, Literatur, Technik, Paläontologie, Phylogenie, Systematik), viii, 1201 pp. Fischer, Jena.

- Jeannel, R. 1949. Les Psélaphides de l'Afrique Orientale (Coleoptera). *Mémoires du Muséum National d'Histoire Naturelle*, (2)29: 1–226.
- Jeannel, R. 1955. Les Psélaphides de l'Afrique australe. *Mémoires du Muséum National d'Histoire Naturelle*, (A, Zoologie)9(1): 1–196.
- Krombein, K. V., Hurd, P. D., Jr., Smith, D. R. & Burks, B. D. 1979. *Catalog of Hymenoptera in America north of Mexico*, vol. 1. xvi, 1198 pp. Smithsonian Institution Press, Washington.
- Lopes, H. de Souza. 1989. Family Sarcophagidae. Pp. 721–732 in Evenhuis, N.L. (Ed.), *Catalog of the Diptera of the Australasian and Oceanian Regions*. 1155 pp. Bishop Museum Press, Honolulu & Brill, Leiden.
- Lopes, H. de Souza, Kano, R., Shinonaga, S. & Kurahashi, H. 1977. Family Sarcophagidae. Pp. 557–583 in Delfinado, M.D. & Hardy, D.E. (Eds.), *A catalog of the Diptera of the Oriental Region*, vol. 3. x, 854 pp. University Press of Hawaii, Honolulu.
- Meigen, J.W. 1803. Versuch einer neuen Gattungs Eintheilung der europäischen zweiflügeligen Insekten. *Magazin für Insektenkunde (Illiger)*, 2: 259–281.
- Meigen, J.W. 1824. *Systematische Beschreibung der bekannten europäischen zweiflügeligen Insekten*, vol. 4. 428 pp. Hamm.
- Newton, A.F., Jr. & Chandler, D.S. 1989. World catalog of the genera of Pselaphidae (Coleoptera). *Fieldiana: Zoology*, (2)53: 1–93.
- Panzer, G.W.F. 1806. *Kritische Revision der Insektenfauna Deutschlands*, vol. 2. [12], 271 pp. Felsecker, Nürnberg.
- Pape, T. 1987. The Sarcophagidae (Diptera) of Fennoscandia and Denmark. *Fauna Entomologica Scandinavica*, 19: 1–203.
- Park, O. 1942. *A study in neotropical Pselaphidae*. x, 403 pp., 21 pls. Northwestern University, Evanston & Chicago.
- Park, O. 1951. Cavernicolous pselaphid beetles of Alabama and Tennessee, with observations on the taxonomy of the family. *Geological Survey of Alabama, Museum Paper*, 31: 1–107.
- Park, O. 1952. A revisional study of neotropical pselaphid beetles. Part One. Tribes Faronini, Pyxidicerini and Jubini. *Chicago Academy of Sciences, Special Publication*, 9(1): 1–49.
- Raffray, A. 1904. Genera et catalogue des Psélaphides. *Annales de la Société Entomologique de France*, 73: 1–400.
- Raffray, A. 1908. Coleoptera. Fam. Pselaphidae. Fascicule 64 in Wytsmann, P. (Ed.), *Genera Insectorum*. 487 pp., 9 pls. Rome.
- Raffray, A. 1911. Pselaphidae: Part 27 in Schenkling, S. (Ed.), *Coleopterorum Catalogus*. 222 pp. Junk, Berlin.
- Rohdendorf, B.B. 1935. Sarcophaginae. Pp. 49–128 in Lindner, E. (Ed.), *Die Fliegen der Palaearktischen Region*. Lieferung 88. Schweizerbart, Stuttgart.
- Rohdendorf, B.B. 1967. [Historical development of sarcophagids] (Diptera, Sarcophagidae). *Trudy Paleontologicheskogo Instituta, Akademia Nauk SSSR*, 116: 1–92. [In Russian.]
- Rossi, P. 1790. *Fauna Etrusca, sistens insecta quae in provinciis Florentina et Pisana praesertim collegit Petrus Rossi*, vol. 2. 348 pp., 10 pls. Masi, Liburni.
- Scopoli, J.K. 1763. *Entomologia Carniolica, exhibens insecta Carnioliae indigena*..... [34]. 420 pp., 37 pls. Trattner, Vindobonae.
- Shewell, G.E. 1987. Sarcophagidae. Pp. 1159–1186 in McAlpine, J.F. (Ed.), *Manual of Nearctic Diptera*, vol. 2. Pp. vi, 675–1332. Monograph No. 28. Biosystematics Research Centre, Ottawa.
- Stein, P. 1900. Die Tachininen und Anthomyinen der Meigen'schen Sammlung in Paris. *Entomologische Nachrichten*, 26: 129–157.
- Townes, H. 1971. The genera of Ichneumonidae, Part 4. *Memoirs of the American Entomological Institute*, 17: 1–372.
- Townes, H. & Townes, M. 1959. Ichneumon-flies of America north of Mexico: 1. Subfamily Metopiinae. *Bulletin of the United States National Museum*, 216: 1–318.
- Townsend, C.H.T. 1908. The taxonomy of the muscoidean flies, including descriptions of new genera and species. *Smithsonian Miscellaneous Collections*, 51(2): 1–138.

- Verves, Yu.G.** 1986. Family Sarcophagidae. Pp. 58–193 in Sóos, Á. & Papp, L. (Eds.), *Catalogue of Palaearctic Diptera*, vol. 12. 265 pp. Elsevier, Amsterdam.
- Verves, Yu.G.** 1989. The phylogenetic systematics of the Miltogrammatine flies (Diptera, Sarcophagidae) of the world. *Japanese Journal of Medical Science & Biology*, **42**: 111–126.
- Viereck, H.L.** 1912. Tryphoninae — a review. *Proceedings of the Entomological Society of Washington*, **14**: 175–178.

Case 2812***Acamptopoeum* Cockerell, 1905 (Insecta, Hymenoptera): proposed designation of *Camptopoeum submetallicum* Spinola, 1851 as the type species**

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Abstract. The purpose of this application is to designate *Camptopoeum submetallicum* Spinola, 1851 as the type species of the South American panurgine bee genus *Acamptopoeum* Cockerell, 1905 in accordance with current usage. The original designation was based on a misidentified type species.

1. Cockerell (1905, p. 320) established the nominal genus *Acamptopoeum* and included a single nominal species, *Camptopoeum trifasciatum* Spinola, 1851 (p. 197), which he designated as the type species. However, Cockerell's characterization of *C. trifasciatum* does not match the original one given by Spinola but that of the female of *Camptopoeum submetallicum* Spinola, 1851 (p. 198). Both Cockerell for *C. trifasciatum* and Spinola for *C. submetallicum* described the abdomen as having hair bands and bluish metallic color. These characters are quite different from *C. trifasciatum* sensu Spinola, the abdomen of which has yellow integumental bands, no hair bands and is never metallic bluish. It is clear that Cockerell misidentified *C. trifasciatum* and that the species he cited under that name was in fact *C. submetallicum*.

2. Friese (1906, p. 176) established *Liopoeum* as a subgenus of *Camptopoeum* Spinola, 1843 (p. 139); one of the included species was *Camptopoeum hirsutulum* Spinola, 1851 (p. 199) which was designated as type species by Sandhouse (1943, p. 564). Schwarz (1931, p. 78) considered *Liopoeum* to be very different from *Camptopoeum* and treated it as a genus. *C. trifasciatum* and *C. hirsutulum* are congeneric and so material labelled *Liopoeum trifasciatum* can be found in many museums and private collections throughout the United States and South America.

3. Cockerell's misidentification has been widely recognized, and the combination *Acamptopoeum submetallicum* Spinola has been used in many papers such as Moure (1944, p. 5), Herrera & Etcheverry (1960, p. 64), Shinn (1965, p. 279), Rozen (1967, p. 5), Toro (1986, p. 125) and Ruz (1991, p. 221) as well as by museum workers. The purpose of this application to the Commission under Article 70b of the Code is to conserve the use of *Acamptopoeum* by designating *Camptopoeum submetallicum* Spinola (= '*C. trifasciatum*' of Cockerell, 1905) as the type species. To retain *Camptopoeum trifasciatum* as the type species of *Acamptopoeum* would contravene current usage and lead to confusion since *Liopoeum* would disappear as a junior subjective synonym of *Acamptopoeum*, and *Parafriesea* Schrottky, 1906 (p. 118) (a replacement name for the junior homonym *Friesea* Schrottky, 1902 (p. 418)) would stand as the generic name for the species now placed in *Acamptopoeum* (see Ruz, 1991, pp. 221–222).

4. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to set aside all previous fixations of type species for the nominal genus *Acamptopoeum* Cockerell, 1905 and to designate *Camptopoeum submetallicum* Spinola, 1851 as the type species;
- (2) to place on the Official List of Generic Names in Zoology the name *Acamptopoeum* Cockerell, 1905 (gender: neuter), type species by designation in (1) above *Camptopoeum submetallicum* Spinola, 1851;
- (3) to place on the Official List of Specific Names in Zoology the name *submetallicum* Spinola, 1851, as published in the binomen *Camptopoeum submetallicum* (specific name of the type species of *Acamptopoeum* Cockerell, 1905).

References

- Cockerell, T.D.A. 1905. Notes on some bees in the British Museum. *Transactions of the American Entomological Society*, **31**: 309–364.
- Friese, H. 1906. Neue Bienenarten aus Chile und Argentina. *Zeitschrift für Systematische Hymenopterologie und Dipterologie*, **6**: 169–176.
- Herrera, J. & Etcheverry, M. 1960. Actualización de los nombres de los ápidos estudiados por Claude Joseph. *Publicaciones del Centro de Estudios Entomológicos. Universidad de Chile*, **1**: 61–64.
- Moure, J.S. 1944. Apoidea da coleção do Conde Amadeu A. Barbiellini (Hym. Apoidea). *Revista de Entomologia*, **15**: 1–18.
- Rozen, J.G., Jr. 1967. Review of the biology of panurgine bees, with observations on North American forms (Hymenoptera, Andrenidae). *American Museum Novitates*, **2297**: 1–44.
- Ruz, L. 1991. Classification and phylogenetic relationships of the panurgine bees: the Calliopsini and allies (Hymenoptera: Andrenidae). *University of Kansas Science Bulletin*, **54**: 209–256.
- Sandhouse, G.A. 1943. The type species of the genera and subgenera of bees. *Proceedings of the United States National Museum*, **92**(3156): 519–619.
- Schrottky, C. 1902. Ensaio sobre as abelhas solitarias do Brazil. *Revista do Museu Paulista*, **5**: 330–613.
- Schrottky, C. 1906. Zur Synonymie der Apiden. *Zeitschrift für Systematische Hymenopterologie und Dipterologie*, **6**: 115–118.
- Schwarz, H.F. 1931. A case of stylopization in a panurgid bee, *Liopoeum submetallicum* (Spinola). *Journal of the New York Entomological Society*, **39**: 77–79.
- Shinn, A.F. 1965. The bee genus *Acamptopoeum*: diagnosis, key and a new species (Hymenoptera: Andrenidae). *Journal of the Kansas Entomological Society*, **38**: 278–284.
- Spinola, M. 1843. Notes sur quelques Hyménoptères peu connus, recueillis en Espagne, pendant l'année 1842, par M. Victor Ghiliani, voyageur-naturaliste. *Annales de la Société Entomologique de France*, (2)**1**: 111–144.
- Spinola, M. 1851. Himenópteros. Pp. 153–560 in Gay, C., *Historia Física y Política de Chile*, vol. 6. 572 pp. Author, Paris.
- Toro, H. 1986. Lista preliminar de los ápidos chilenos (Hymenoptera: Apoidea). *Acta Entomológica Chilena*, **13**: 121–132.

Case 2792

***Cynolebias opalescens* Myers, 1942 and *Cynolebias splendens* Myers, 1942 (Osteichthyes, Cyprinodontiformes): proposed conservation of the specific names**

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Abstract. The purpose of this application is to conserve the specific names of two species of killifishes, *Cynolebias opalescens* Myers, 1942 and *C. splendens* Myers, 1942, which are the subjects of governmental and international conservation agency protection. The names are threatened by long unused senior subjective synonyms that have been resurrected recently.

1. Faria & Muller (1937) described two species of killifishes (family RIVULIDAE) from south-eastern Brazil using the names *Cynopoecilus fluminensis* (p. 99) and *Gynopoecilus* [sic, an apparent typographical error for *Cynopoecilus*] *sandrii* (p. 98, fig. 1). The paper in which these species were described was in a nautical journal and was not picked up by the *Zoological Record*. The names apparently (see Costa & Lacerda, 1988) had not been used in any scientific literature until Lacerda (1987) commented on the distributional status of these species (using the widely accepted senior generic synonym *Cynolebias*), noted that the names were senior subjective synonyms of *C. opalescens* and *C. splendens* respectively, both of Myers (1942), and adopted the earlier synonyms. Costa & Lacerda (1988) also adopted the senior synonyms in their redescrptions of the two species.

2. In 1942, Myers described *Cynolebias opalescens* (p. 107) and *C. splendens* (p. 110). Lazara (1984) listed nine literature citations for each of these names, during the period 1942 to 1982 (exclusive of those cited in para. 3), including both scientific and aquarist literature.

3. In 1975 *Cynolebias opalescens* and *C. splendens* were included in the initial record of Appendix II of the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) and those names have been maintained on the CITES list to date. The Association of Systematic Collections list these names in its summary of (United States) federally controlled wildlife (Estes & Sessions, 1983). The International Union for the Conservation of Nature and Natural Resources (IUCN) included both species in its *Red Data Book* (Miller, 1969) and continue to recognize these species by Myers's (1942) names in its revised *Red Data Book* (Miller, 1977) and the *Red List of Threatened Animals* (IUCN, 1988) as endangered species.

4. Efforts to regulate international trade, or in situ conservation, of these species depend, in part, on stable nomenclature. At present, specimens of these species presumably could be exported into CITES member nations, without permit, under their recently resurrected senior synonyms.

5. As the two species under discussion have been accorded protection by both governmental and international conservation agencies under the names *Cynolebias opalescens* and *C. splendens*, and as the specific names *sandrii* and *fluminensis* were unused for a period of 50 years from the time the names were first proposed, during which period the junior synonyms were used in a variety of scientific and aquarist publications, resurrection of the senior synonyms would cause unnecessary and preventable confusion for persons outside the community of zoological systematists.

6. The International Commission of Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to suppress the following specific names for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:
 - (a) *fluminensis* Faria & Muller, 1937, as published in the binomen *Cynopoecilus fluminensis*;
 - (b) *sandrii* Faria & Muller, 1937, as published in the binomen *Gynopoecilus* (= *Cynopoecilus*) *sandrii*;
- (2) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *opalescens* Myers, 1942, as published in the binomen *Cynolebias opalescens*;
 - (b) *splendens* Myers, 1942, as published in the binomen *Cynolebias splendens*;
- (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the following names:
 - (a) *fluminensis* Faria & Muller, 1937, as published in the binomen *Cynopoecilus fluminensis* and as suppressed in (1)(a) above;
 - (b) *sandrii* Faria & Muller, 1937, as published in the binomen *Gynopoecilus* (= *Cynopoecilus*) *sandrii* and as suppressed in (1)(b) above.

References

- Costa, W.J.E.M. & Lacerda, M.T.C. 1988. Identité et redescription de *Cynolebias sandrii* et de *Cynolebias fluminensis* (Cyprinodontiformes, Rivulidae). *Revue Française de Aquariologie*, 14(4): 127–132.
- Estes, C. & Sessions, K.W. (Eds.). 1983. *Controlled wildlife, a three-volume guide to U.S. wildlife laws and permit procedures*, vol. 2 (Federally controlled species). 327 pp. Association of Systematic Collections, Lawrence, Kansas.
- Faria, A. & Muller, H. 1937. Espécie da família Cyprinodontidae, Genero *Cynopoecilus*, constatadas em águas do Brasil. *Revista Naval*, 37(3): 98–99.
- IUCN (The IUCN Conservation Monitoring Centre). 1988. *1988 IUCN Red List of Threatened Animals*. 154 pp. International Union for the Conservation of Nature and Natural Resources, Cambridge.
- Lacerda, M.T.C. 1987. Comentários sobre as espécies de *Cynolebias* incluídas na lista dos peixes ameaçados de extinção. *Revista Aquariofilia*, 2(3): 34–36.
- Lazara, K.J. 1984. *The killifish master index, a checklist of oviparous cyprinodontiform fishes*. 293 pp. The American Killifish Association, Cincinnati, Ohio.
- Miller, R.R. 1969. *Red Data Book*, vol. 4 (Pisces: Freshwater Fishes). Unnumbered pages. International Union for the Conservation of Nature and Natural Resources, Survival Service Commission, Morges, Switzerland.
- Miller, R.R. 1977. *Red Data Book*, vol. 4 (Pisces: Freshwater Fishes). Unnumbered pages. International Union for the Conservation of Nature and Natural Resources, Survival Service Commission, Morges, Switzerland.
- Myers, G.S. 1942. Studies on South American fresh-water fishes. I. *Stanford Ichthyological Bulletin*, 2(4): 89–114.

Case 2601

***Filimanus* Myers, 1936 (Osteichthyes, Perciformes): proposed designation of *Filimanus perplexa* Feltes, 1991 as the type species**

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Abstract. The purpose of this application is the designation of *Filimanus perplexa* Feltes, 1991 as the type species of the polynemid genus *Filimanus* Myers, 1936. This is the taxonomic species misidentified by Myers as *Polynemus melanochir* Valenciennes, 1831; retention of the latter nominal species as its type would render *Filimanus* a junior subjective synonym of *Polynemus* Linnaeus, 1758, and a new generic name would be required for species currently placed in *Filimanus*.

1. Myers (1936, p. 379) established the genus *Filimanus* (family POLYNEMIDAE, the threadfins) with a diagnosis based on a single specimen (USNM 72742) in the U.S. National Museum of Natural History, Washington. He identified the specimen as being *Polynemus melanochir* Valenciennes, 1831 (p. 513), and this nominal species is thus the type of *Filimanus* by monotypy. The description by Valenciennes is brief but the characters and comparisons used in his account are diagnostic. The original description was based on a drawing sent by Major Finlayson from Sumatra. Examination of this drawing in the Bibliothèque Centrale, Muséum National d'Histoire Naturelle, Paris, has made it quite clear to which taxonomic species Valenciennes applied the name *P. melanochir*. The specimen used by Myers in his description of *Filimanus* was misidentified and belongs to a then undescribed species (see para. 4). The case is referred to the Commission under Article 70b of the Code.

2. The use of the generic name *Polynemus* Linnaeus, 1758 (p. 317) has been quite inconsistent and often non-monophyletic (see Myers, 1936; Feltes, 1991). Myers's perception of the species before him as a separate genus is entirely reasonable, as I have discussed (Feltes, 1991, pp. 304-305).

3. *Polynemus melanochir* Valenciennes, 1831 is a valid species. My unpublished studies show it is probably a sister taxon to *P. paradiseus* Linnaeus, 1758 (p. 317) which was designated as the type species of *Polynemus* in Opinion 93 (October 1926), and is certainly congeneric. If *P. melanochir* were retained as the type species of *Filimanus*, regardless of misidentification, it would be necessary to provide a new generic name for the specimen examined by Myers, as well as other species (Feltes, 1991). This would not only add another name to the literature, but contribute to the already confused state of *Polynemus* by adding *Filimanus* to its synonymy. The name *Filimanus* has been used as valid in the following representative publications: De Sylva (1984, p. 540), Gloerfelt-Tarp & Kailola (1984, pp. 231, 347), Nelson (1984, p. 325) and Eschmeyer (1990, p. 151). I have a forthcoming paper (Feltes, 1993, in press) that includes a discussion of *Filimanus*.

4. In a revision of *Filimanus* I redescribed the species misidentified by Myers (and others) as *P. melanochir*, and gave it the name *Filimanus perplexa* Feltes, 1991 (p. 307). The holotype, from Bali, is specimen BMNH 1988.4.6.1. in the Natural History Museum, London, and the specimen (USNM 72742) from Java used by Myers (1936) is a paratype.

5. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to set aside all previous fixations of type species for the nominal genus *Filimanus* Myers, 1936, and to designate *Filimanus perplexa* Feltes, 1991 as the type species;
- (2) to place on the Official List of Generic Names in Zoology the name *Filimanus* Myers, 1936 (gender: feminine), type species by designation in (1) above *Filimanus perplexa* Feltes, 1991;
- (3) to place on the Official List of Specific Names in Zoology the name *perplexa* Feltes, 1991, as published in the binomen *Filimanus perplexa* (specific name of the type species of *Filimanus* Myers, 1936).

References

- De Sylva, D.P. 1984. Polynemoidei: development and relationships. Ontogeny and systematics of fishes. *American Society of Ichthyologists and Herpetologists Special Publications*, 1: 540–541.
- Eschmeyer, W.N. 1990. *Catalog of the genera of recent fishes*. 697 pp. California Academy of Sciences, San Francisco.
- Feltes, R.M. 1991. Revision of the polynemid genus *Filimanus*, with the description of two new species. *Copeia*, 1991(2): 302–322.
- Feltes, R.M. 1993 (in press). *Parapolynemus*, new genus for the polynemid fish previously known as *Polynemus verekeri*. *Copeia*, 1993(1).
- Gloerfelt-Tarp, T. & Kailola, P.J. 1984. *Trawled fishes of southern Indonesia and northwestern Australia*. 406 pp. Australian Development Assistance Bureau, Sydney.
- Linnaeus, C. 1758. *Systema Naturae*, Ed. 10, vol. 1. 824 pp. Salvii, Holmiae.
- Myers, G.S. 1936. A new polynemid fish collected in the Sadong River, Sarawak, by Dr William T. Hornaday, with notes on the genera of Polynemidae. *Journal of the Washington Academy of Sciences*, 26(9): 376–382.
- Nelson, J.S. 1984. *Fishes of the world*, Ed. 2. 523 pp. Wiley-Interscience, New York.
- Valenciennes, A. 1831. Des Polynèmes. Pp. 512–519 in Cuvier, G.L.C.F.D. & Valenciennes, A., *Histoire naturelle des poissons*, vol. 7. 531 pp. Levrault, Paris.

Case 2821***Rana megapoda* Taylor, 1942 (Amphibia, Anura): proposed conservation of the specific name**

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Abstract. The purpose of this application is to conserve the specific name of the well known ranid *Rana megapoda* Taylor, 1942, which is a large frog found in south-central Mexico, by the suppression of the unrecognized senior subjective synonym *Rana trilobata* Mocquard, 1899.

1. Taylor (1942, p. 310) described *Rana megapoda*, a large frog confined to south-central Mexico. Without exception this frog has been referred to by the specific name *megapoda* which, however, is antedated by a previously unrecognized synonym. It would be most unfortunate to allow *R. megapoda* to be changed after its unchallenged use since the original description in 1942.

2. The previously unrecognized senior name is *R. trilobata* Mocquard, 1899 (p. 158). Hillis, Frost & Frost (1983, p. 73) recounted the history of the name *R. trilobata*, long referred to the *Rana pipiens* complex of leopard frogs (in which *trilobata* had been regarded as a subspecies of *Rana berlandieri* Baird, 1859), and reallocated *R. trilobata* to the synonymy of *Rana sinaloae* Zweifel, 1954 (p. 131); *Rana sinaloae* is a junior synonym of *Rana pustulosa* Boulenger, 1883 (p. 343), as I have reported (Webb, 1984, p. 237). I (Webb, 1991, p. 13) have examined the holotype of *R. trilobata* (specimen no. 97-189 in the Muséum National d'Histoire Naturelle, Paris) from Guadalajara, Mexico, and have demonstrated it to be a specimen of *R. megapoda* and thus incorrectly allocated to the synonymy of *R. sinaloae* (= *R. pustulosa*).

3. *Rana trilobata* Mocquard, 1899 has remained unused as a senior synonym of *R. megapoda* Taylor, 1942, the name having been associated with other species of ranid frogs. *Rana megapoda* is firmly entrenched in the primary zoological literature (see, for example, Hillis, Frost & Wright, 1983, p. 134 and Smith & Taylor, 1948, p. 100). A representative list of a further nine references demonstrating usage of the name is held by the Commission Secretariat. It is in the interest of nomenclatural stability to retain the name in its usage of the past 50 years.

4. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to suppress the specific name *trilobata* Mocquard, 1899, as published in the binomen *Rana trilobata*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) to place on the Official List of Specific Names in Zoology the name *megapoda* Taylor, 1942, as published in the binomen *Rana megapoda*;

- (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *trilobata* Mocquard, 1899, as published in the binomen *Rana trilobata*, and as suppressed in (1) above.

References

- Boulenger, G.A. 1883. Descriptions of new species of lizards and frogs collected by Herr A. Forrer in Mexico. *Annals and Magazine of Natural History*, (5)**11**(65): 342–344.
- Hillis, D.M., Frost, D.R. & Frost, J.S. 1983. Allocation and distribution of *Rana trilobata* Mocquard. *Journal of Herpetology*, **17**(1): 73–75.
- Hillis, D.M., Frost, J.S. & Wright, D.A. 1983. Phylogeny and biogeography of the *Rana pipiens* complex: a biochemical evaluation. *Systematic Zoology*, **32**(2): 132–143.
- Mocquard, M.F. 1899. Reptiles et batraciens recueillis au Mexique par M. Léon Diguët en 1896 et 1897. *Bulletin de la Société Philomatique de Paris*, (9)**1**(4): 154–169.
- Smith, H.M. & Taylor, E.H. 1948. An annotated checklist and key to the Amphibia of Mexico. *Bulletin of the United States National Museum*, **194**: 1–118.
- Taylor, E.H. 1942. New Caudata and Salientia from Mexico. *University of Kansas Science Bulletin*, (28)**11**(14): 295–323.
- Webb, R.G. 1984. Herpetography in the Mazatlán-Durango region of the Sierra Madre Occidental, Mexico. *Special Publication, University of Kansas Museum of Natural History*, **10**: 17–241.
- Webb, R.G. 1991. The identity of *Rana trilobata* Mocquard (Anura: Ranidae). *Herpetologica*, **47**(1): 13–21.
- Zweifel, R.G. 1954. A new frog of the genus *Rana* from western Mexico with a key to the Mexican species of the genus. *Bulletin of the Southern California Academy of Sciences*, **53**(3): 131–141.

Case 2382

***Megophrys montana* Kuhl & van Hasselt, 1822 (Amphibia, Anura): proposed placement of both the generic and specific names on Official Lists, and *Leptobrachium parvum* Boulenger, 1893 (currently *Megophrys parva*): proposed conservation of the specific name**

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Abstract. The purpose of this application is to place the name *Megophrys* Kuhl & van Hasselt, 1822 and the valid name of its type species, *M. montana* Kuhl & van Hasselt, 1822, on the appropriate Official Lists, and to conserve the specific name of *M. parva* (Boulenger, 1893). The last name is threatened by the unused senior subjective synonym *Xenophrys monticola* Günther, 1864, for which suppression is proposed. The genus *Megophrys* (family PELOBATIDAE Bonaparte, 1850, subfamily MEGOPHRYINAE Bonaparte, 1850) includes over 20 species from southern, eastern and southeastern Asia.

1. The generic name *Megophrys* Kuhl & van Hasselt, 1822 (ref. 1822a) was established for a single species from Java. In the description the species was mentioned twice, under two different spellings (see para. 5 below): *montana* (p. 102) and *monticola* (p. 104). In a summary of the work (Kuhl & van Hasselt, 1822b, col. 475) only the spelling *monticola* appeared, whilst in subsequent French translations from the original Dutch (Kuhl, 1824a, p. 83; Kuhl, 1824b, p. 371) *montana* was used. Gravenhorst (1829, p. 47), acting as first reviser, adopted *montana* and for a little more than a century this was universally used as the valid name (see, for example, Tschudi, 1838, p. 82; Duméril & Bibron, 1841, p. 458; Günther, 1858, pp. 36–37; Günther, 1864, p. 413; Gadow, 1901, p. 60; van Kampen, 1923, p. 8; Noble, 1927, p. 75; further authors are cited in Dubois, 1982, p. 265).

2. Smith (1931, p. 12), however, considered that the spelling *monticola* should be adopted, and noted: 'I can see no reason for rejecting *monticola* as the correct name of the species usually known as *montana*'. The name *monticola* was used subsequently by a number of authors (see Inger, 1954, p. 222; Inger, 1966, p. 19, 39–41; Berry, 1975, pp. 5, 39), although others (Bourret, 1942, p. 190) continued to use *montana*. In 1982 I (Dubois, 1982, pp. 263, 269) pointed out that *montana* was the valid spelling and this has been followed by recent authors (Frost, 1985, pp. 413, 415; Duellman & Trueb, 1986, p. 523, fig. 19.31). I now propose that the name *Megophrys* Kuhl & van Hasselt, 1822, and the name of its type species, *M. montana* Kuhl & van Hasselt, 1822, be placed on the appropriate Official Lists. Four syntype specimens of *M. montana*, numbered RMNH 2212, are in the Nationaal Natuurhistorisch Museum, Leiden, The Netherlands.

3. Kuhl & van Hasselt's (1822) generic name appeared with two different spellings: *Mogophrys* (p. 102) and *Megophrys* (p. 104). The former spelling was clearly a typographical error; it was not used by the original authors in subsequent publications,

nor by anyone else since. In 1940 Neave (pp. 81, 198) listed both names and recorded *Megophrys* as valid. Following Wagler's (1830) unjustified emendation, the name *Megalophrys* remained in use for many years, until the work of Stejneger (1926) reintroduced *Megophrys*.

4. Günther (1864, p. 414, pl. 26, fig. H) established the generic name *Xenophrys* for a single new species, *X. monticola*, from Sikkim and the Khasi Hills. Boulenger (1893, pp. 311, 343) placed *monticola* Günther in *Leptobrachium* Tschudi, 1838 and (p. 344, pl. 11, figs. 2, 2a) described a species *L. parvum*, based on five specimens from the Karin Hills, Upper Burma. Subsequently, he (Boulenger, 1908, pp. 408, 419) considered *monticola* Günther and *parvum* to be synonyms; he transferred the species to the genus *Megalophrys* Wagler, 1830 (p. 204; an unjustified emendation of *Megophrys* Kuhl & van Hasselt, 1822; see para. 3 above) and adopted the junior name *parva*. This was to avoid confusion with *monticola* Kuhl & van Hasselt, 1822 (although for the latter Boulenger (pp. 408, 410, 411) used the name *montana*), and he noted (p. 420, footnote): 'The specific name of [*Xenophrys monticola* Günther] must be changed, as being pre-occupied in the genus *Megalophrys*'. Following Boulenger (1908), the specific name *monticola* Günther, 1864 has not been used, whilst *parva* Boulenger, 1893 has been universally adopted (see, for example, Nieden, 1923, p. 57; Noble, 1927, p. 75; Bourret, 1942, pp. 203–204; Taylor, 1962, pp. 266, 299–302; Gorham, 1966, p. 21; Inger, 1966, p. 19; Waltner, 1973, p. 22; Dubois, 1974, p. 353; Gorham, 1974, p. 43; Dubois, 1976, p. 12; Frost, 1985, p. 416; a representative list of a further 11 references demonstrating usage is held by the Commission Secretariat). Capocaccia (1957, p. 211) designated a male specimen, no. MSNG 29412 in the Museo Civico di Storia Naturale di Genova, as the lectotype of *Leptobrachium parvum*. *Xenophrys* has not been used as a valid name since Boulenger's (1908) work.

5. Resurrection of the name *monticola* Günther, 1864 would be most unfortunate since, although *monticola* Kuhl & van Hasselt, 1822 is not a valid name, it has been used in the past. Kuhl & van Hasselt's names *montana* and *monticola* (which have the same meaning) have been considered as being different spellings of the same name (Dubois, 1982, p. 264, footnote; 1989, p. 97). Following Gravenhorst's (1829) first reviser action, *monticola* Kuhl & van Hasselt becomes an unavailable incorrect original spelling (Articles 24c, 32b(i) and 32d of the Code), and *monticola* Günther the valid specific name for the taxon currently called *Leptobrachium parvum*. If *montana* and *monticola* Kuhl & van Hasselt were to be treated as different names, rather than spellings, for the species, Gravenhorst's action would render *monticola* an invalid (but available) junior objective synonym of *montana*; *monticola* Günther would be (following Boulenger's 1908 generic placement) a permanently invalid secondary homonym (Article 59b), replaced by *parvum* (following Boulenger's synonymy) without the need for Commission intervention. To remove doubt I now propose that the name *monticola* Günther be suppressed, and that the Commission confirm the status of *monticola* Kuhl & van Hasselt as an incorrect original spelling.

6. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers:

(a) to suppress the specific name *monticola* Günther, 1864, as published in the binomen *Xenophrys monticola* for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;

- (b) to rule that the name *monticola* Kuhl & van Hasselt, 1822, as published in the binomen *Megophrys monticola*, is an incorrect original spelling of *Megophrys montana* Kuhl & van Hasselt, 1822;
- (2) to place on the Official List of Generic Names in Zoology the name *Megophrys* Kuhl & van Hasselt, 1822 (gender: feminine), type species by monotypy *Megophrys montana* Kuhl & van Hasselt, 1822;
- (3) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *montana* Kuhl & van Hasselt, 1822, as published in the binomen *Mogophrys* [sic] *montana* (specific name of the type species of *Megophrys* Kuhl & van Hasselt, 1822);
 - (b) *parvum* Boulenger, 1893, as published in the binomen *Leptobrachium parvum* and as defined by the lectotype designated by Capocaccia (1957);
- (4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Megalophrys* Wagler, 1830 (an unjustified emendation of *Megophrys* Kuhl & van Hasselt, 1822);
- (5) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the following names:
 - (a) *monticola* Günther, 1864, as published in the binomen *Xenophrys monticola* and as suppressed in (1)(a) above;
 - (b) *monticola* Kuhl & van Hasselt, 1822, as published in the binomen *Megophrys monticola* (an incorrect original spelling of *montana* Kuhl & van Hasselt, 1822).

References

- Berry, P.Y. 1975. *The amphibian fauna of Peninsular Malaysia*. 130 pp. Tropical Press, Kuala Lumpur.
- Boulenger, G.A. 1893. Concluding report on the Reptiles and Batrachians obtained in Burma by Signor L. Fea, dealing with the collection made in Pegu and the Karin Hills in 1887-88. *Annali del Museo Civico di Storia Naturale di Genova*, (2a)13: 304-347.
- Boulenger, G.A. 1908. A revision of the oriental pelobatid Batrachians (genus *Megalophrys*). *Proceedings of the Zoological Society of London*, 1908: 407-430.
- Bourret, R. 1942. Les Batraciens de l'Indochine. *Mémoires de l'Institut Océanographique de l'Indochine*, 6: 1-517.
- Capocaccia, L. 1957. Catalogo dei tipi di anfibi del Museo Civico di Storia Naturale di Genova. *Annali del Museo Civico di Storia Naturale di Genova*, 69: 208-222.
- Dubois, A. 1974. Liste commentée d'amphibiens récoltés au Népal. *Bulletin du Muséum National d'Histoire Naturelle, Zoologie*, (3)213(143): 341-411.
- Dubois, A. 1976. Les grenouilles du sous-genre *Paa* du Népal (famille Ranidae, genre *Rana*). *Cahiers népalais-Documents*, 6: 1-275.
- Dubois, A. 1982. Le statut des noms génériques d'Amphibiens Anoures créés par Kuhl & van Hasselt (1822): *Megophrys*, *Occidozyga* et *Rhacophorus*. *Bulletin du Muséum National d'Histoire Naturelle*, (4)4(A, 1-2): 261-280.
- Dubois, A. 1989. *Leptobrachium parvum* Boulenger, 1893 (Amphibia, Anura): proposed conservation. *Alytes*, 7(3): 97-100.
- Duellman, W.E. & Trueb, L. 1986. *Biology of amphibians*. xvii, 670 pp. McGraw-Hill, New York.
- Duméril, A.-M.-C. & Bibron, G. 1841. *Erpétologie générale ou histoire naturelle complète des reptiles*, vol. 8. vii, 792 pp. Librairie Encyclopédique de Roret, Paris.
- Frost, D.R. 1985. *Amphibian species of the world*. v. 732 pp. Allen Press & Association of Systematics Collections, Lawrence, Kansas.
- Gadow, H. 1901. *Amphibia and Reptiles*, part I (Amphibia). Pp. xiii, 1-274. Macmillan, London.

- Gorham, S.W.** 1966. Liste der rezenten Amphibien und Reptilien. Ascaphidae, Leiopelmatidae, Pipidae, Discoglossidae, Pelobatidae, Leptodactylidae, Rhinophrynidae. *Das Tierreich*, **85**: 1–222.
- Gorham, S.W.** 1974. *Checklist of world amphibians up to January 1, 1970*. 173 pp. New Brunswick Museum, Saint-John.
- Gravenhorst, J.L.C.** 1829. *Deliciae Musei Zoologici Vratislaviensis, fasciculus primus, continens chelonios et batrachia*. xiv, 106 pp., 17 pls. Vossii, Lipsiae.
- Günther, A.** 1858. *Catalogue of the Batrachia Salientia in the collection of the British Museum*. xvi, 160 pp., 12 pls. British Museum, London.
- Günther, A.** 1864. *The reptiles of British India*. xxvii, 452 pp., 26 pls. Ray Society, London.
- Inger, R.F.** 1954. Systematics and zoogeography of Philippine Amphibia. *Fieldiana: Zoology*, **33**(4): 183–531.
- Inger, R.F.** 1966. The systematics and zoogeography of the Amphibia of Borneo. *Fieldiana: Zoology*, **52**: 1–402.
- Kuhl, H.** 1824a. Sur les Reptiles de Java. *Bulletin des Sciences Naturelles et de Géologie*, **2**: 79–83.
- Kuhl, H.** 1824b. Seconde lettre sur les reptiles de l'île de Java. *Bulletin des Sciences Naturelles et de Géologie*, **2**: 370–371.
- Kuhl, H. & van Hasselt, J.C.** 1822a. Uittreksels uit brieven van de Heeren Kuhl en Van Hasselt, aan de Heeren C.J. Temminck, Th. Van Swinderen en W. De Haan. *Algemeene Konst- en Letter-Bode*, **7**: 99–104.
- Kuhl, H. & van Hasselt, J.C.** 1822b. Aus einem Schreiben von Dr. Kuhl und Dr. Van Hasselt aus Java, an Professor Th. Van Swinderen zu Groningen. *Isis* (von Oken), **1822**(4): cols. 472–476.
- Neave, S.A.** 1940. *Nomenclator Zoologicus*, vol. 3 (M–P). 1065 pp. Zoological Society of London, London.
- Nieden, F.** 1923. Amphibia. Anura I. Subordo Aglossa und Phaneroglossa, Sectio I Arcifera. *Das Tierreich*, **46**: 1–584.
- Noble, G.K.** 1927. The value of life history data in the study of the evolution of the Amphibia. *Annals of the New York Academy of Sciences*, **30**: 31–128.
- Smith, M.A.** 1931. The herpetology of Mt. Kinabalu, North Borneo, 13,455 ft. *Bulletin of the Raffles Museum*, **5**: 3–32.
- Stejneger, L.** Two new tailless amphibians from Western China. *Proceedings of the Biological Society of Washington*, **39**: 53–54.
- Taylor, E.H.** 1962. The amphibian fauna of Thailand. *University of Kansas Science Bulletin*, **43**(8): 265–599.
- Tschudi, J.J.** 1838. Classification der Batrachier, mit Berücksichtigung der fossilen Thiere dieser Abtheilung der Reptilien. *Mémoires de la Société des Sciences Naturelles de Neuchâtel*, **2**: 1–102. (Issued in the serial in [1839] but published as a separate in 1838).
- Van Kampen, P.N.** 1923. *The Amphibia of the Indo-Australian archipelago*. xii, 304 pp. Brill, Leiden.
- Wagler, J.** 1830. *Natürliches System der Amphibien...* vi, 354 pp. Cotta, München.
- Waltner, R.C.** 1973. Geographical and altitudinal distribution of amphibians and reptiles in the Himalayas. Part 1. *Cheetal*, **16**: 17–25.

Case 2802

Anisolepis grilli Boulenger, 1891 (Reptilia, Squamata): proposed conservation of the specific name

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Abstract. Two species of the lizard genus *Anisolepis* Boulenger, 1885 (family POLYCHRIDAE) occur in southeastern Brazil, Uruguay and northern Argentina. In this century they have been referred to as *A. undulatus* (Wiegmann, 1834) and *A. grilli* Boulenger, 1891. The purpose of this application is to conserve the specific name *grilli* for the species which occurs in Brazil and Misiones Provinces, Argentina. The name is threatened by two senior subjective synonyms, *Laemactus fitzingeri* and *L. obtusirostris*, both of Wiegmann (1834).

1. Wiegmann (1834, p. 45) described the genus *Laemactus* and included four new nominal species. Brief descriptions were provided (p. 46) for three Brazilian species, *fitzingeri*, *obtusirostris* and *undulatus*, and a lengthy description for a Mexican species, *longipes*. Duméril & Bibron (1837, pp. 72–76) repeated the descriptions of *fitzingeri*, *obtusirostris* and *undulatus*. Fitzinger (1843, p. 16) designated *longipes* as the type species of *Laemactus*.

2. Wiegmann's nominal species *fitzingeri*, *obtusirostris* and *undulatus* have been placed in a number of genera: by Fitzinger (1843, p. 62) in *Urostrophus* Duméril & Bibron, 1837 (type species *U. vautieri* Duméril & Bibron, 1837); by Gray (1845, pp. 184–185) in *Ecphymotes* Fitzinger, 1826 (type species *Polychrus acutirostris* Spix, 1825); and by Boulenger (1885b, p. 121) in *Enyalius* Wagler, 1830 (type species *Agama catenata* Wied-Neuwied, 1821). Gray (1845) based his descriptions of the three species entirely on those of Wiegmann (1834); his work is the last in which the name *obtusirostris* was used as valid. Boulenger (1885b) included the latter as a synonym of *undulatus*.

3. Boulenger (1885a, p. 85) established the new genus *Anisolepis* with the single species *iheringii*, based on two female specimens in the Natural History Museum, London (catalogue nos. 1946.8.5.90–91, formerly 85.6.26.4–5). *A. iheringii* is therefore the type species of the genus by monotypy. Later that year Boulenger (1885b, p. 122, pl. 9, fig. 3) repeated the description and figured *A. iheringii*. In the 'Addenda and Corrigenda' (1887, pp. 500–501) the species *undulatus* was transferred to *Anisolepis* and *iheringii* was placed in its synonymy; *undulatus* has since been treated as the valid name of the type species of *Anisolepis*. In 1891 (p. 909) Boulenger described *A. grilli* from

Palmeira, Brazil. Peters & Donoso-Barros (1970, p. 42) subsequently synonymized the nominal species *A. lionotus* Werner, 1897 (p. 470) from Blumenau, Brazil, with *grilli*. Both *undulatus* Wiegmann, 1834 and *grilli* Boulenger, 1891 are regarded as the valid names for the Brazilian species of *Anisolepis* and are not considered to be synonymous with the names of the type species of any of the genera mentioned in para. 2 above.

4. One of us (Etheridge, 1969, p. 239) briefly examined the holotypes of *Laemanctus fitzingeri*, *obtusirostris* and *undulatus* in the Museum für Naturkunde der Humboldt-Universität, Berlin (catalogue nos. 495, 496 and 497 respectively), and considered them to be one species, currently known as *Anisolepis undulatus*. Etheridge also pointed out that it was clear from Boulenger's (1885b, p. 121) characterization of *Enyalius fitzingeri*, as well as from an examination of his specimens, that the species known as *fitzingeri* since Boulenger's work is actually *Enyalius bilineatus* Duméril & Bibron, 1837 (see, for example, Burt & Burt, 1933, p. 23 and Amaral, 1937, pp. 176, iv, in which the name *fitzingeri* has been misused in the sense of *bilineatus*). We have both (Etheridge & Williams, 1991, p. 332) since re-examined the holotypes of *fitzingeri*, *obtusirostris* and *undulatus* and compared them with one of the two syntypes of *Anisolepis grilli* (catalogue no. 1946.8.5.58 (formerly 91.9.24.10) in the Natural History Museum, London; the second syntype, no. 1946.8.12.38 (formerly 91.11.19.27) is a skeletal preparation). We found that, contrary to Etheridge (1969), the types of *fitzingeri* and *obtusirostris* are conspecific with *grilli*, and not with *undulatus*. We published descriptions of the two Brazilian species of *Anisolepis*, together with a diagnostic key (1991, p. 351).

5. The name *Anisolepis grilli* Boulenger, 1891 has been widely cited in works on genetics, biology and ecology, as well as taxonomy, and has appeared in the following representative list of recent publications: Gorman, Atkins & Holzinger, 1967, pp. 283, 209 and Gorman, 1973, p. 373 (chromosome number); Maderson, 1970, p. 197 (digital scale structure); Peters & Donoso-Barros, 1970, p. 42 (synonymy; distribution and key); Soma, Beçak & Beçak, 1974a, p. 227 (karyotype and DNA content); Soma, Beçak & Beçak, 1974b, p. 1325 (DNA content); Gallardo, 1977, p. 125 (behavior and comparison with *undulatus*); Rand, 1982, pp. 173–174 (body size and egg clutch size); Vanzolini, 1983, p. 127 (sympatry with *Polychrus acutirostris*); Olmo, 1984, p. 22 (genome size); Etheridge & de Queiroz, 1988, p. 305 (digital lamellar scales); Etheridge & Williams, 1991 (morphology, taxonomy, distribution and relationships). The name *obtusirostris* Wiegmann, 1834 has not been used for more than 150 years (see para. 2 above), and *fitzingeri* Wiegmann, 1834 has been misused for another species (see para. 4 above). To resurrect either of these names for the taxon currently called *grilli* would cause confusion and seriously threaten nomenclatural stability. We have previously recorded our intention to apply to the Commission for the suppression of the names *fitzingeri* and *obtusirostris* (Etheridge & Williams, 1991, p. 332, footnote).

6. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to suppress the following specific names for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:
 - (a) *fitzingeri* Wiegmann, 1834, as published in the binomen *Laemanctus fitzingeri*;
 - (b) *obtusirostris* Wiegmann, 1834, as published in the binomen *Laemanctus obtusirostris*;

- (2) to place on the Official List of Specific Names in Zoology the name *grilli* Boulenger, 1891, as published in the binomen *Anisolepis grilli*;
- (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the following names:
 - (a) *fitzingeri* Wiegmann, 1834, as published in the binomen *Laemanctus fitzingeri* and as suppressed in (1)(a) above;
 - (b) *obtusirostris* Wiegmann, 1834, as published in the binomen *Laemanctus obtusirostris* and as suppressed in (1)(b) above.

References

- Amaral, A. do. 1937. Estudos sobre lacertilios neotropicos. 4. Liste remissiva dos lacertilios do Brasil. *Memorias do Instituto Butantan*, **11**: 167–204, i–ix.
- Boulenger, G.A. 1885a. Second list of reptiles and batrachians from the Province Rio Grande do Sul, Brazil, sent to the Natural-History Museum by Dr. H. von Ihering. *Annals and Magazine of Natural History*, (5)**16**(92): 85–88.
- Boulenger, G.A. 1885b, 1887. *Catalogue of the lizards in the British Museum (Natural History)*, Ed. 2. Vol. 2, xiii, 497 pp., 24 pls. (1885b); vol. 3, xii, 575 pp., 40 pls. (1887). British Museum, London.
- Boulenger, G.A. 1891. Description of a new iguanoid lizard of the genus *Anisolepis*. *Annali del Museo Civico di Storia Naturale di Genova*, (2)**10**: 909.
- Burt, C.E. & Burt, M.D. 1933. A preliminary check list of the lizards of South America. *Transactions of the Academy of St. Louis*, **28**(1, 2): 1–104, i–iv.
- Duméril, A.M.C. & Bibron, G. 1837. *Erpétologie générale ou histoire naturelle complète des reptiles*, vol. 4. ii, 577 pp. Librairie Encyclopédique de Roret, Paris.
- Etheridge, R.E. 1969. A review of the iguanid lizard genus *Enyalius*. *Bulletin of the British Museum (Natural History)*, Zoology, **18**(8): 231–260.
- Etheridge, R.E. & de Queiroz, K. 1988. A phylogeny of Iguanidae. Pp. 283–368 in Estes, R. & Pregill, G. (Eds.), *Phylogenetic relationships of the lizard families: essays commemorating Charles L. Camp*. xii, 631 pp. Stanford University Press, Stanford.
- Etheridge, R.E. & Williams, E.E. 1991. A review of the South American lizard genera *Urostrophus* and *Anisolepis* (Squamata: Iguania: Polychridae). *Bulletin of the Museum of Comparative Zoology, Harvard University, Cambridge, Mass.*, **152**(5): 317–361.
- Fitzinger, L. 1826. *Neue Classification der Reptilien nach ihren natürlichen Verwandtschaften nebst einer Verwandtschafts-Tafel und einem Verzeichnisse der Reptilien-Sammlung des k.k. zoologischen Museum's zu Wien*. 66 pp. Heubner, Wien.
- Fitzinger, L. 1843. *Systema Reptilium*. Fasciculus primus (Amblyglossae). 106, vi pp. Braumüller & Seidel, Wien.
- Gallardo, J.M. 1977. *Reptiles de los alrededores de Buenos Aires*. 213 pp. Editorial Universitaria de Buenos Aires, Buenos Aires.
- Gorman, G.C. 1973. The chromosomes of the Reptilia: a cytogenetic interpretation. Pp. 394–424 in Chiarelli, A.B. & Cappanna, E. (Eds.), *Cytotaxonomy and vertebrate evolution*. xv, 783 pp. Academic Press, London.
- Gorman, G.C., Atkins, L. & Holzinger, T. 1967. New karyotypic data on 15 genera of lizards in the family Iguanidae, with a discussion of taxonomic and cytological implications. *Cytogenetics*, **6**: 286–299.
- Gray, J.E. 1845. *Catalogue of the specimens of lizards in the collection of the British Museum*. xxviii, 289 pp. Newman, London.
- Maderson, P.F.A. 1970. Lizard glands and lizard hands: models for evolutionary study. *Forma et Functio*, **3**: 179–204.
- Olmo, E. 1984. Genomic composition of reptiles: evolutionary perspectives. *Journal of Herpetology*, **18**(1): 20–32.
- Peters, J.A. & Donoso-Barros, R. 1970. Catalogue of the Neotropical Squamata. Part 2 (lizards and amphisbaenians). *Bulletin of the United States National Museum*, **297**: 1–293.

- Rand, A.S.** 1982. Clutch and egg size in Brazilian iguanid lizards. *Herpetologica*, **38**(1): 171–178.
- Soma, M.L., Beçak, M.L. & Beçak, W.** 1974a. Variabilidade cariotípica e conteúdo de DNA em lacertílios (Abstract). *Ciência e Cultura*, São Paulo, **26**(supplement): 227–228.
- Soma, M.L., Beçak, M.L. & Beçak, W.** 1974b. Estudo comparativo de conteúdo de DNA em 12 espécies de lacertílios. *Ciência e Cultura*, São Paulo, **27**(12): 1324–1327.
- Spix, J.B.** 1825. *Animalia nova sive species novae lacertarum, quas in itinere per Brasiliam annis MDCCCXVII–MDCCCXX jussu et auspiciis Maximiliani Josephi I Bavariae Regis suscepto collegit et descripsit Dr. J.B. Spix*. 26 pp., 28 pls. Weigel, Lipsiae.
- Vanzolini, P.E.** 1983. Guiana-Brasílian *Polychrus*: distribution and speciation (Sauria: Iguanidae). Pp. 118–131 in Rhodin, G.J. & Miyata, K. (Eds.), *Advances in herpetology and evolutionary biology*. xix, 725 pp. Museum of Comparative Zoology, Cambridge, Massachusetts.
- Wagler, J.G.** 1830. *Natürliches System der Amphibien mit vorangehender Classification der Säugthiere und Vögel*. vi, 354 pp. Cotta, Munich.
- Werner, F.** 1897. Die Iguaniden-Gattung *Anisolepis* Blng. *Verhandlungen der Kaiserlich-Königlichen Zoologisch-Botanischen Gesellschaft in Wien*, **46**(10): 470–473.
- Wied-Neuwied, M.** 1821. *Reise nach Brasilien in den Jahren 1815 bis 1817*, vol. 2. xviii, 345 pp. Brönnner, Frankfurt am Main.
- Wiegmann, A.F.A.** 1834. *Herpetologia Mexicana, seu descriptio amphibiorum Novae Hispaniae, quae itineribus Comitum de Sack, Ferdinandi Deppe et Chr. Guil. Schiede in Museum Zoologicum Berolinense Pervenerunt*. Pars prima, saurorum species amplexens, adiecto systematis saurorum prodromo... observationibus. vi, 54 pp., 10 pls. Lüderitz, Berlin.

Comment on the proposed confirmation of unavailability of the name *Fusus* Helbling, 1779 (Mollusca, Gastropoda)

(Case 2729; see BZN 48: 92–96, 244–246; 49: 68–70)

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We wish to reply to published comments opposing our application for the rejection of *Fusus* Helbling, 1779.

Holthuis (BZN 48: 244–245) comments that all our arguments are based on speculations about Helbling's concepts and also quoted Hemming's statement about '... intermediate terms identical in character with those which it is now asked should be rejected...'. If terms which are 'identical in character' can be recognized, why cannot a term not even 'identical in character' be more easily recognized?

Vokes (BZN 48: 245–246) attempts to discredit our application by reference to Commission action suppressing *Xancus* [Röding], 1798 in favor of the later *Turbinella* Lamarck, 1799, an action opposed by all malacologists who wrote a comment. However, Vokes quoted Keen's 1957 statement about the 'supposedly firm ground of priority'. It is this firm ground that we are seeking in this application.

Vokes also made the statement that 'every relevant work published in the last 60 years has used *Fusinus*...', ignoring references in paragraphs 14 and 15 of our application.

We particularly object to the statement made by Beu, Marshall & Ponder (BZN 49: 68–70) that since 1906 '... the usage of *Fusinus* in this sense has become the normal, thoroughly accepted practice by 100% of malacologists and paleontologists'. This is contrary to references given in paragraphs 14 and 15 of the application and additional usages of *Fusus* Bruguière, 1789 as a valid name can be easily located. A search of only a few minutes located such usage by Nicklès (1950), Knudsen (1956), Pasteur-Humbert (1962), Barnard (1959, 1969), Ondrejčková (1972) and Kensley (1973). A thorough search of the literature would certainly uncover more usages of *Fusus* Bruguière.

It is our opinion that the only objection to this application with any validity is that it will upset 'stability'. The genus typified by the species *Fusus* (or *Fusinus*) *colus* (Linnaeus, 1758) has not been critically monographed, or even studied in depth, in recent years and it is a matter of conjecture at this point as to how many species will remain in the genus after a taxonomic revision.

Additional references

- Barnard, K.H. 1959. Contributions to the knowledge of South African marine mollusca. Part 2. Gastropoda: Prosobranchiata: Rhachiglossa. *Annals of the South African Museum*, **45**: 1–237.
- Barnard, K.H. 1969. Contributions to the knowledge of South African marine mollusca. Part 6. Supplement. *Annals of the South African Museum*, **47**: 595–661.
- Kensley, B. 1973. *Sea-shells of Southern Africa. Gastropods*. 225 pp. Cape & Transvaal Printers, Cape Town.

- Knudsen, J.** 1956. Marine prosobranchs of tropical West Africa (Stenoglossa). *Atlantide-Report*, 4: 7–110.
- Nicklès, M.** 1950. *Mollusques testacés marins de la côte d'Afrique*. 269 pp. Lechevalier, Paris.
- Ondrejčková, A.** 1972. Eggenburgian molluscs of Southern Slovakia. *Zborník Geologických Vied Západné Karpaty*, 16: 5–147.
- Pasteur-Humbert, C.** 1962. Les mollusques marins testacés du Maroc. Catalogue non critique. 1. Les gastéropodes. *Travaux de l'Institut Scientifique Chérifien, Série Zoologie*, 23: 1–224.

Comments on the proposal to remove the homonymy between CLAVIDAE McCrady, 1859 (Cnidaria, Hydrozoa) and CLAVINAE Casey, 1904 (Mollusca, Gastropoda)
(Case 2710; see BZN 48: 192–195; 49: 144–145)

(1) John K. Tucker

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I am unable to agree on the need for the proposals of Cernohorsky, Cornelius & Sysoev concerning the mollusk subfamily name.

The issue at stake is the maintenance of nomenclatural stability and the authors contend that their proposed action will achieve this. Applications of this nature usually involve the conservation of a name as it has been used but their proposal introduces a new spelling, CLAVUSINAE.

I understand the desire to preserve the Powell (1942) system of subfamily classification in the TURRIDAE and how that might seem to be related to nomenclatural stability, but it is my belief that the proposals will neither preserve nor improve stability. If the authors believe that *Clavus* de Montfort, 1810 cannot be contained in the DRILLIINAE then they should define the characters that separate CLAVINAE (or CLAVUSINAE) from Olsson's 1964 (and Morrison's 1965, p. 2) DRILLIINAE. I myself do not believe that nomenclatural stability exists in the TURRIDAE at the subfamily level. Every author who has considered a subfamily classification has come to a unique conclusion, and not all authors working on genera usually included in the CLAVINAE (or DRILLIINAE) recognize the subfamily as valid; for example, Nordsieck (1968) placed *Clavus* in the TURRINAE (although in 1977 he changed his mind).

It seems to me that the turrid name CLAVINAE does not need Commission action: Most post-Powell authors who recognize the group do so primarily on the radular morphology. McLean (1971), in particular, defined the CLAVINAE as based on the possession of a prototypic radular type. If, as most authors agree, the prototypic radular state is an ancestral condition then the CLAVINAE (or DRILLIINAE) are defined by a plesiomorphic character state. Only apomorphic character states can be used to determine monophyly. Therefore, from a cladistic point of view, the CLAVINAE (or DRILLIINAE) is either a paraphyletic or polyphyletic taxon. I can see no benefit from a ruling concerning the name of a taxon that will almost certainly be found to include multiple sister taxa that gave rise to the other subfamilies of the TURRIDAE.

Additional references

- Morrison, J.P.E.** 1965. On the families of Turridae. *Report. American Malacological Union*, 32: 1–2.

Nordsieck, F. 1968. *Die europäischen Meeres-Geshäuseschnecken (Prosobranchia) vom Eismeer bis Kapverden und Mittelmeer*. viii, 273 pp., 31 pls. Fischer, Stuttgart.

Nordsieck, F. 1977. *The Turridae of the European seas*. 131 pp., 26 pls. La Conchiglia, Rome.

(2) Dale R. Calder

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We support the proposal of Cernohorsky, Cornelius & Sysoev to remove the homonymy between the family-group names CLAVIDAE McCrady, 1859 (Cnidaria) and CLAVINAE Casey, 1904 (Mollusca) by changing the latter to CLAVUSINAE. Replacement or respelling of the senior homonym, widely used in the literature on hydrozoans for more than a century, would not serve the interests of nomenclatural stability.

Comments on the proposed conservation of some generic names first proposed in *Histoire abrégée des insectes qui se trouvent aux environs de Paris* (Geoffroy, 1762) (Crustacea, Insecta)

(Case 2292; see BZN 48: 107–134; 49: 71–72, 149–150)

(1) L.B. Holthuis

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I have the greatest admiration for the thoroughness and expertise with which Dr Kerzhner treated this case and so has made possible a final decision concerning Geoffroy's generic names, many of which have been 'illegally' used since Geoffroy's work was rejected for nomenclatural purposes in 1954 (Opinion 228). There are a few points, however, that need some comment.

(i) As stated by Kerzhner and Cameron (BZN 48: 107–108, 133–134), Müller (1764) in the introduction to his *Fauna Insectorum Fridrichsdalina* simply listed Geoffroy's names and their Linnaean equivalents in tabular form. This does not make the Geoffroy names available as from Müller's 1764 work, since Article 11d(ii) of the Code says that 'the status of a previously unavailable name is not changed by its mere citation accompanied by a reference to the work in which the name was published but was not made available'.

(ii) I do not feel competent to comment on the insect names in this application, but can do so on the two crustacean ones (see BZN 48: 111–112). It seems likely that among the insect generic names of Geoffroy (1762) there are many that could be used without intervention by the Commission, although with a later authorship and date.

(iii) *Asellus* Geoffroy, 1762 is unavailable from Geoffroy (1762) under Opinion 228, or from Müller (1764). The first use of *Asellus* as an available generic name seems to be by Schaeffer (1766) in his *Elementa Entomologica*, an unpaginated work consisting of four sections and an index. *Asellus* is given on the 16th page of Section 3 with a number of characters and a reference to plate 22, the explanation of which again gives

characters; the description and figure make *Asellus* available, even though Schaeffer did not use specific names.

(iv) Schluga (1767, p. 46) used both *Asellus* and *Binoculus* in a list of the genera of 'Insecta', with short diagnoses; as with Schaeffer no specific names were mentioned in the work.

(v) The genus usually cited as *Asellus* Geoffroy, 1762 (or, wrongly, 1764) should be correctly referred to as *Asellus* Schaeffer, 1766 (Section 3, p. [16] and pl. 22), and *Binoculus* should be cited as *Binoculus* Schluga, 1767 (p. 46). *Binoculus* was suppressed in Opinion 502 (January 1958), but the authorship was given as Müller (1776) and this should be changed.

(vi) Summarizing, I propose that the requests in Kerzhner's para. B.3 on BZN 48: 112 be changed as follows:

- (1) abandon;
- (2) (b) amend authorship of *Binoculus* Müller, 1776 to Schluga, 1767;
- (3) amend authorship of *Asellus* Geoffroy, 1762 to Schaeffer, 1766;
- (4) as for (3);
- (5) (b) as for (2)(b).

These changes are purely editorial.

(2) Hans Silfverberg

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Dr Kerzhner's application is very thorough, and he presents good arguments for his solution to the old problem of Geoffroy's names. His application preserves current use, and is therefore in the spirit of the Code. The procedure I once suggested (1978; *Notulae Entomologicae*, 58: 117–119), that is attributing the names to Müller (1764), may have stretched the Code but did not break it, and did not require Commission action. However, I do not oppose Kerzhner's proposals except for a detail relating to one particular name.

The exception is *Peltis* (see para. K.22 on BZN 48: 122). As explained by Kerzhner, Geoffroy used it in a sense different from current use and Müller (1776) was the first to include nominal species (including the currently accepted type species *Silpha grossa* Linnaeus, 1758) in the genus. I consider that *Peltis* should be taken from Müller (1776) and not, as suggested by Kerzhner, from Kugelann (1792), who merely further restricted the genus. Kerzhner's proposals (6)(r) and (9)(k) in para. K.30 should be amended accordingly.

(3) P.K. Tubbs

Executive Secretary, International Commission on Zoological Nomenclature

1. As discussed in Dr Kerzhner's application (BZN 48: 109, para. A.7) Geoffroy's 1762 *Histoire abrégée...* contained 59 new generic names. If Kerzhner's proposals and those of Dr Borowiec (BZN 45: 194–196) are approved 40 of Geoffroy's names will have been conserved, and 14 will have been suppressed to conserve the usage of the same or other names from later authors. In the remaining five cases senior Linnaean synonyms are in use.

2. The Commission attempted to deal with the status of Geoffroy's generic names in Opinion 228. It was noted in that Opinion that 'in some cases the rejection of names as

first published by such authors [as Geoffroy] would clearly give rise to great confusion'. The ruling in the Opinion denying availability to many generic names in established use which were published in Geoffroy's work, on the ground that he had used polynomial specific names, has proved to be unfortunate. The decision was approved at a meeting in July 1948, and in the Proceedings and again in 1952 (BZN 7: 198–199) 'specialists' were invited to apply for the conservation of appropriate Geoffroy names. Despite the receipt of several applications [all later agreed] the Opinion was published in April 1954. It will have taken four decades and immense efforts by numerous authors, and by the Commission and its Secretariat, to remedy the never intended consequences. So far less than half of the names have been finally dealt with. If Dr Kerzhner's application is not successful the 'illegal' nomenclature referred to by Kerzhner and Holthuis will continue. I earnestly recommend acceptance of the application, with some amendments as discussed below.

3. Sixteen Geoffroy names have already been conserved in nine separate Opinions, and Kerzhner has proposed the conservation of 24 more (including two at present attributed to later authors). In every instance this is based on well established usage, and comments in support of some have been published. Eight names published by Geoffroy have been in established use in the different senses of later authors: *Crabro* Fabricius, 1775 has already been conserved, *Bruchus* Linnaeus, 1767 and *Mylabris* Fabricius, 1775 have been proposed by Borowiec (BZN 45: 194–196), and Kerzhner has proposed conservation of the remaining five junior homonyms.

4. Kerzhner has proposed that all the 40 Geoffroy names which have been, or should be, conserved by the Commission's plenary powers should be attributed to the *Histoire abrégée*, i.e. to Geoffroy, 1762. However, he has suggested that the ones not in use should be placed on the Official Index of Rejected and Invalid Names with the authorship 'Geoffroy in Müller, 1764'. Müller (1764) presented a comparison of Linnaean and Geoffroy names and descriptions. The citation 'Geoffroy in Müller, 1764' is cumbersome and undesirable (Pope, BZN 49: 71); its validity has been disputed by Holthuis (above), and there is no logical reason why it (or Müller, 1764) should be the reference for the rejected names and Geoffroy, 1762 that for the conserved ones. This is further discussed in para. 7 below.

5. Prof Holthuis has suggested above that the crustacean name *Asellus* should be placed on the Official List with the authorship of Schaeffer (1766), rather than being conserved from Geoffroy (1762) as suggested by Kerzhner. The argument is that it is unnecessary to use the Commission's plenary powers to conserve the authorship of the name. If *Asellus* were an isolated case this would be undeniable, but, as already mentioned, 16 of the 40 names in use have already been conserved with Geoffroy's authorship. If no more were to be, the Official List would contain 16 attributed to Geoffroy (1762), 14 to Schaeffer (1766) and 10 to Schluga (1767), despite the fact that all had been published in the same work. The names have for more than two centuries been referred to Geoffroy, and not to Schaeffer or Schluga. There are further complications: for instance *Pyrochroa* 'Schluga, 1767' would need to be conserved (cf. Kerzhner's para. K.26) by the suppression of the spelling *Pyrochora* Schaeffer, 1766. Rejected names on the Official Index would be assigned some to Schaeffer and some to Schluga. All this would be the 'chaos and arbitrary attribution to different authors and dates' deplored by Kerzhner in his para. A.7. More work and delay would be needed to achieve this undesirable end, whereas the effort needed to conserve the Geoffroy names has already been invested by

Dr Kerzhner and others, including the Commission. For these reasons, the suggestion of Prof Holthuis regarding *Asellus* has considerable disadvantages. However, the formal proposals in Kerzhner's application have been structured so that the Commission will be asked to vote on a name-by-name procedure (see para. A.8), and it will therefore be easily possible, although entirely anomalous, to attribute *Asellus* to Schaeffer, 1766 and to have 39 names conserved from Geoffroy, 1762.

6. I am convinced that only the acceptance of Kerzhner's application can give stability; it is in accord with historical reality and with the 'invitation to specialists' issued in association with the 1954 Opinion.

7. A procedural difficulty arises in the case of those Geoffroy names which are senior homonyms or synonyms of names in use, and whose conservation is therefore not requested by Kerzhner or Borowiec. These are *Acrydium*, *Binoculus*, *Bruchus*, *Byrrhus*, *Cistela*, *Cucujus*, *Formicaleo*, *Melolontha*, *Mylabris*, *Peltis*, *Rhinomacer*, *Tetigonia* and *Tritoma*. At the present moment these names cannot be suppressed from Geoffroy (1762), even though this was done for *Crabro* in Opinion 144 (1943), since they are not available from that work as a consequence of Opinion 228. Their availability from the work of Müller (1764) has been challenged as mentioned in para. 4 above. All of Geoffroy's names are available from either Schaeffer (1766) or Schluga (1767), but, as pointed out in para. 5, it would be extremely confusing to introduce these 'new' authorships (even for purposes of suppression only). By far the most straightforward course is to take *all* the names from where they appeared, Geoffroy's work. All 59 new generic names therein have now been considered in detail, either in Opinions already made or in the applications of Kerzhner and Borowiec. The result is that Opinion 228 has been in effect totally superseded, even though by instalments; the logical conclusion is the revocation of that Opinion and this is proposed below. It should be emphasized that the validity of no name will be affected by this seemingly drastic step. Also proposed below are minor amendments to Kerzhner's formal proposals incorporating those which have been published in comments, and the addition of *Forbicina*, *Hepa* and *Tinaea* Geoffroy to the Official Index as junior objective synonyms of Linnaean names. As already mentioned, the Commission will be asked to vote on a name-by-name basis in all cases.

8. I comment separately (BZN 49: 227–228) on Dr Borowiec's application (BZN 45: 194–196), and on the name *Acrydium* (BZN 49: 228–229).

9. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to rule that, notwithstanding the use of polynomial specific names in the work by E.L. Geoffroy (1762) entitled *Histoire abrégée des insectes qui se trouvent aux environs de Paris*, generic names published in that work are deemed available for nomenclatural purposes;
- (2) to delete this work from the Official Index of Rejected and Invalid Works in Zoological Nomenclature, and to place it on the Official List of Works Approved as Available for Zoological Nomenclature with an endorsement to reflect the ruling requested in (1) above;
- (3) to make such editorial changes in the Official Lists and Indexes as are necessary from the rulings requested in (1) and (2) above, together with previous Opinions;
- (4) to accept the following amendments to the proposals published by I.M. Kerzhner in BZN 48: 107–133 (references being given to his paragraphs in each case):

- (i) amend all references to Geoffroy in Müller, 1764 to read Geoffroy, 1762;
- (ii) B.3 (2) (a) withdraw [covered by deletion of (5)(a) below];
 - (b) amend Müller, 1776 to read Geoffroy, 1762;
- (5) (a) delete this entry from Official Index;
 - (b) amend Müller, 1776 to read Geoffroy, 1762;
- C.2 [new para.] add *Forbicina* Geoffroy, 1762 to Official Index as a junior objective synonym of *Lepisma* Linnaeus, 1758;
- D.3 no changes [apart from amendment of Geoffroy in Müller, 1764];
- E.2 (1) and (2) amend Geoffroy in Fourcroy, 1785 to read Geoffroy, 1762;
- F.2 [new para.] add *Hepa* Geoffroy, 1762 to Official Index as a junior objective synonym of *Nepa* Linnaeus, 1758;
- G.2 no changes [apart from amendment of Geoffroy in Müller, 1764];
- H.5 (3)(b) amend (Olivier, 1791) to read (Fabricius, 1781);
- J.3 add new (4) to amend entry for *Tinaea* Geoffroy, 1762 on the Official Index to record that it is a junior objective synonym of *Tinea* Linnaeus, 1758;
- K.30(3)(a) and (c) amend authorships to read Geoffroy, 1762;
 - (3)(b) and (7)(f) omit;
 - (6)(r), (7)(e) and (9)(k) amend Kugelann, 1792 to read Müller, 1776;
 - (8) amend Müller, 1776 to read Geoffroy, 1762.

References

- Schaeffer, J.C. 1766. *Elementa entomologica*. 168 pp, 133 pls. Weiss, Ratisbonae.
- Schluga, J.B. 1767. *Primae lineae cognitionis insectorum cum figuris aeneis*. 1, 47, 4 pp., 2 pls. Kraus, Vienna.

Comment on the proposed conservation of *Bruchus* Linnaeus, 1767, *Ptinus* Linnaeus, 1767 and *Mylabris* Fabricius, 1775 (Insecta, Coleoptera)

(Case 2618; see BZN 45: 194–196; 48: 143–147)

P.K. Tubbs

Executive Secretary, International Commission on Zoological Nomenclature

1. The generic names *Bruchus* and *Mylabris* were first published, with descriptions, on pp. 163 and 266 of Geoffroy's 1762 *Histoire abrégée des insectes qui se trouvent aux environs de Paris*. They appeared again in Müller (1764) and Schaeffer's 1766 *Elementa Entomologica*. The latter two works included no species in any genus, but Geoffroy employed polynomial specific names and for this reason his work was ruled in Opinion 228 to be unavailable; the new generic names were not excepted but specialists were asked for advice. The authorship of these names, as of 1764, has been given as 'Müller' by Borowiec (BZN 45: 194–196) and as 'Geoffroy in Müller' by Kerzhner (BZN 38: 5–7; 48: 107–133), Kerzhner & Kirejtshuk (BZN 48: 143–144) and myself (BZN 48: 146–147). However, doubt exists as to whether, under Article 11d of the Code, any names were made available in Müller's work, and it has been proposed (BZN 49: 226) that generic names should now be accepted as having been made available in Geoffroy (1762); this course has already been accepted by the Commission in 16 particular instances. If Kerzhner's proposals (BZN 48: 107–133) and those of Borowiec are

approved 40 of Geoffroy's 59 new generic names will have been conserved, and 19 rejected or suppressed in accord with the usage of modern times.

2. Borowiec has drawn attention to the fact that *Bruchus* has long been accepted in the seed beetle sense of Linnaeus (1767, p. 604) and not in that of Geoffroy, and similarly *Mylabris* in the oil beetle sense of Fabricius (1775, p. 261). He has proposed the conservation of the names in the later senses, and also that of *Ptinus* Linnaeus, 1767 (p. 565), in long-established use but a junior synonym of *Bruchus* sensu Geoffroy. These actions have been supported by Kerzhner (BZN 48: 119, 121) and by Kerzhner & Kirejtshuk (BZN 48: 143–144). The latter have pointed out that *Laria* Scopoli, 1763 is (like *Mylabris* sensu Geoffroy; see Gentry, BZN 48: 144–145) a senior synonym of *Bruchus* Linnaeus, 1767 and they have proposed its suppression.

3. I propose that the Commission accept the proposals of Borowiec in BZN 45: 195, with the following amendment and addition:

- (1) references to 'Müller, 1764' be amended to read 'Geoffroy, 1762'. (This is subject to the Commission accepting Proposal (1) on BZN 49: 226, relating to Kerzhner's proposal to conserve Geoffroy's names; if that is not approved Müller, 1764 could be replaced by Geoffroy in Müller, 1764 or Schaeffer, 1766, but the names have never been attributed to Schaeffer);
- (2) the addition of the proposals of Kerzhner & Kirejtshuk (BZN 48: 143).

Comment on the proposed suppression of the generic names *Acrydium* and *Acridium*, and on the conservation of *Psophus* Fieber, 1853 (Insecta, Orthoptera)
(Case 2568; see BZN 45: 191–193; 46: 42–44)

P.K. Tubbs

Executive Secretary, International Commission on Zoological Nomenclature

1. Family-group names based on *Acrida* Linnaeus, 1758 are in universal use at both family and superfamily rank. In an application concerning the precedence of family-group names in the Orthoptera, Key (BZN 45: 191, para. 4) mentioned the confusion which had been caused by the existence of the generic names *Acrydium* and *Acridium* and derived family-group names, and proposed their suppression; this has been supported by Kerzhner (BZN 46: 42; 48: 112) and by Dr V.R. Vickery and the late Dr D.K. McE. Kevan (unpublished).

2. *Acrydium* was first published with a description by Geoffroy (1762, p. 390) in his *Histoire abrégée des insectes qui se trouvent aux environs de Paris*, and was cited by Müller (1764, p. 17). It was treated as a valid name by Schluga (1767, p. 33) a year after Schaeffer (1766, genus 79, p. 15) had made the name *Acridium* available for the same taxon (neither of these works was mentioned in Key's application, but this does not affect any issue). As discussed by Key in para. 4 of his application, *Acrydium* and *Acridium* have not been used for very many years. Family-group names based on them were used in the 19th century, with various spellings, and caused confusion because of their similarity to the names ACRIDIDAE and ACRIDOIDEA, nominal taxa based on *Acrida* Linnaeus which were introduced only later but which, as mentioned above, are in use.

3. The type species of *Acrida* was designated in Opinion 299 (1954) as *Gryllus turritus* Linnaeus, 1758. The type species of *Acrydium* (= *Acridium*) is *Gryllus stridulus* Linnaeus, 1758, so it is a senior objective synonym of *Psophus* Fieber, 1853, as pointed out by Kerzhner (BZN 46: 42). *Psophus* is in use; it was placed on the Official List of Generic Names in Opinion 149 (1943) but its synonymy with *Acrydium* was not then dealt with by the suppression of the latter. *Acrida* and *Acrydium*/*Acridium* (i.e. *Psophus*) are entirely distinct and it is unfortunate that the names resemble each other.

4. Complications concerning various family-group names have delayed the disposal of Key's application (BZN 45: 191–193). As discussed in the preceding comments it is very desirable to settle finally the status of the 59 generic names erected by Geoffroy (1762). If the applications of Kerzhner and Borowiec are approved *Acrydium* will be the only remaining Geoffroy name (cf. Kerzhner's para. D.1 on BZN 48: 112). Its suppression is therefore proposed below, as is that of *Acridium* Schaeffer, 1766. Key (para. 7 on BZN 45: 192) has proposed the suppression of both generic names, but gave their authorships as Müller, 1764 and 1776 respectively. If Proposal (1) on BZN 49: 226 is not approved *Acrydium* could be taken from Geoffroy in Müller, 1764 or Schluga, 1767 (see para. 2 above). There is of course no need to place *Acrida* and *Psophus* on the Official List.

5. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to suppress the following generic names for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:
 - (a) *Acrydium* Geoffroy, 1762;
 - (b) *Acridium* Schaeffer, 1766;
- (2) to place the following names on the Official Index of Rejected and Invalid Generic Names in Zoology:
 - (a) *Acrydium* Geoffroy, 1762, as suppressed in (1)(a) above;
 - (b) *Acridium* Schaeffer, 1766, as suppressed in (1)(b) above.

Additional references

- Geoffroy, E.L. 1762. *Histoire abrégée des insectes qui se trouvent aux environs de Paris*. Vol. 1, xxviii, 523 pp. Vol. 2, 690 pp. Durand, Paris.
- Schaeffer, J.C. 1766. *Elementa entomologica*. 168 pp., 133 pls. Weiss, Ratisbonae.
- Schluga, J.B. 1767. *Primae lineae cognitionis insectorum cum figuris aeneis*. 1, 47, 4 pp., 2 pls. Kraus, Vienna.

Comments on the proposed conservation of the names *Lincus* Stål, 1867 and *croupius* Rolston, 1983 (Insecta, Heteroptera)
(Case 2798; see BZN 49: 19–21)

(1) L.B. Holthuis

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The arguments to save the well-known name *Lincus* for a genus of Heteroptera that is important in phytopathology are convincing. However, I see no reason to suppress

the specific name *bipunctata* Spinola, 1850 in favour of *croupius* Rolston, 1983. It seems a great advantage to accept the 133-year older name for the species; this gives more nomenclatural stability as any overlooked synonym published since 1850 cannot do any harm. Therefore, I suggest the rejection of proposals (1)(b) and (5) on BZN 49: 20, and the substitution of *bipunctata* for *croupius* in proposal (3)(b).

(2) L.H. Rolston

Louisiana Agricultural Experiment Station, Baton Rouge, Louisiana 70803-1710, U.S.A.

In response to the above objection by Holthuis to the suppression of the specific name *bipunctata* Spinola, 1850 and the placement of *croupius* Rolston, 1983 on the Official List of Specific Names, it appears to me that nomenclatural stability would be served best by suppressing a name used once and only once in primary literature and conserving the synonym that has been used in applied work by seven authors, in addition to my 1983 paper. There is a manuscript in press by two additional authors (G. Couturier & F. Kahn) that also uses the specific name *croupius*. This name has thus been used by at least 10 authors in 6 papers since 1983. Perhaps it is unfortunate that I am the author of the specific name proposed as an addition to the Official List. I am not biased because of authorship and shall not be in the least perturbed on personal grounds should the proposal be rejected.

Comments on the proposed conservation of the generic name *Helophorus* Fabricius, 1775 (Insecta, Coleoptera) as the correct original spelling

(Case 2796; see BZN 49: 30-31)

(1) A. Smetana

Centre for Land and Biological Resources Research, Biological Division, Agriculture Canada, Ottawa, Ontario K1A 0C6, Canada

I am in full support of the application by R.B. Angus to conserve the name *Helophorus*.

Angus correctly states that Illiger's emendation of the original Fabricius spelling of *Elophorus* to *Helophorus* is unjustified under Article 33b of the Code. However, the fact that the overwhelming majority of authors, both old and recent, used Illiger's spelling *Helophorus* should be taken into consideration. I would like to emphasize here that the spelling *Helophorus* is used in the recent and comprehensive treatment of the genera of hydrophiloid beetles by Hansen (1991); this will be used as the standard reference for many years to come. The spelling *Helophorus* is used consistently also in many recent non-taxonomic papers in the fields of palaeontology (e.g. Schwert, 1992), ecology (Koch, 1989) and economic entomology (Booth, Cox & Madge, 1990), and in recent catalogues and checklists (e.g. Lucht, 1987; Roughley, 1991).

A return to the original Fabricius spelling *Elophorus* would certainly not contribute to the stability of nomenclature.

Additional references

- Booth, R.G., Cox, M.L. & Madge, R.B. 1991. *IIE guides to insects of importance to man*. 3. Coleoptera. 384 pp. International Institute of Entomology, London.
- Hansen, M. 1991. *The hydrophiloid beetles. Phylogeny, classification and a revision of the genera (Coleoptera, Hydrophiloidea)*. Biologiske Skrifter 40. 367 pp. Det Kongelige Danske Videnskabernes Selskab, Copenhagen.
- Koch, K. 1989. *Die Käfer Mitteleuropas. Ökologie*. Vol. 1. 440 pp. Krefeld.
- Lucht, W.H. 1987. *Die Käfer Mitteleuropas. Katalog*. 342 pp. Krefeld.
- Roughley, R.E. 1991. Family Hydrophilidae. Pp. 130–135 in: Bousquet, Y. (Ed.), *Checklist of beetles of Canada and Alaska*. Agriculture Canada, Ottawa.
- Schwert, D.P. 1992. Faunal transitions in response to an ice age: the late Wisconsinian record of Coleoptera in the north-central United States. *Coleopterists' Bulletin*, **46**: 68–94.

(2) G.N. Foster

The Balfour-Browne Club, 3 Eglinton Terrace, Ayr KA7 1JJ, Scotland, U.K.

I write in support of the proposal to conserve the spelling *Helophorus*. I would like to draw the Commission's attention to the following points emphasizing the need for conservation of usage:

1. Angus has in press the most important text to be assembled concerning the genus *Helophorus* (*Süßwasserfauna von Mitteleuropa*, vol. 20, section 10, part 2). This has been severely delayed already and will appear with the name *Helophorus* used throughout. *Elophorus* would undermine the value of this *magnum opus*.

2. The genus includes one species (*Helophorus brevipalpis*) that is often the commonest insect in flight in western Europe, and therefore frequently appears in ecological publications. The genus also includes several crop pests. Reversion to *Elophorus* would cause confusion to ecologists, some of whom would resist the change and others of whom would remain in ignorance of it.

3. The genus features strongly in palaeoecological studies, another area in which it would be undesirable to cause confusion by change of usage.

4. Hansen's monograph (1991) incontrovertibly establishes the family status of the HELOPHORIDAE, whereas previously many authors have treated *Helophorus* as part of the HYDROPHILIDAE. A change in the name would cause confusion at the family level at a time when many workers have just adjusted to use of the name HELOPHORIDAE.

(3) Alfred F. Newton, Jr.

Field Museum of Natural History, Roosevelt Road at Lake Shore Drive, Chicago, Illinois 60605–2496, U.S.A.

The spelling *Helophorus* has achieved near-universal use for this genus and as the base for the family-group name based on it (HELOPHORINAE or HELOPHORIDAE). Although there have been a few recent uses of *Elophorus*, it is still possible at this time to avoid long-term confusion in the literature by conserving *Helophorus*.

M. Hansen (1991) used *Helophorus* and HELOPHORIDAE in his recently published comprehensive work on hydrophiloid beetles and M. Thayer and I have done the same in a work on family-group names in the HYDROPHILOIDEA and STAPHYLINOIDEA (*Fieldiana, Zoology*, in press). Both works are likely to be widely used as references for some time, which argues further for conserving *Helophorus*.

(4) J.A. Owen

8 Kingsdown Road, Epsom, Surrey KT17 3PU, U.K.

I have read this application with great interest and wish it to be known that it has my strong support.

(5) Paul J. Spangler

Department of Entomology, National Museum of Natural History, Smithsonian Institution, Washington, D.C. 20560, U.S.A.

I strongly recommend that the Commission conserve *Helophorus* as the correct name of this taxon. Illiger's (1801) emendation has been widely used for very many years, as is documented in the application.

(6) D.T. Bilton

Institutionen för Genetik, Uppsala Universitet, Box 7003, S-75007 Uppsala, Sweden

I have recently seen the application to conserve the currently used spelling of the water beetle genus name *Helophorus*. As someone who has worked with aquatic Coleoptera for a considerable time I would like to support this application. *Helophorus* is one of the most familiar and widespread genera of water beetles in the northern hemisphere, and is known to many people other than students of the group. A return to the original Fabrician spelling would be most unwelcome to people familiar with these insects, and would only serve to confuse those who are not!

(7) Support for the conservation of the spelling *Helophorus* has also been received from Dr Hans Silfverberg (Universitetets Zoologiska Museum, N. Järnväggsgatan 13, SF-00100 Helsinki, Finland).

Comments on the proposed conservation of *Schizopus* Le Conte, 1858 (Insecta, Coleoptera)

(Case 2773; see BZN 48: 305–307)

(1) L.B. Holthuis

Nationaal Natuurhistorisch Museum, Postbus 9157, 2300 RA Leiden, The Netherlands

The author of the application writes (para. 1) that he has not been able to ascertain the exact dates of *Schizopus* Le Conte, 1858 and *Schizopus* Claparède & Lachman, 1858 and he dates them therefore as 31 December 1858.

I can help with *Schizopus* Le Conte, which was published in vol. 10, p. 70 of *Proceedings of the Academy of Natural Sciences of Philadelphia* (1858). The 'Index to the scientific contents of the Journal and Proceedings of the Academy of Natural Sciences of Philadelphia', published in 1913 by the Academy, has a chapter dealing with the dates of publication of these two serials. On p. xii there is a note that of the *Proceedings* (1858 = vol. 10) the receipt of the first part (pp. 1–88) was acknowledged by the American Antiquarian Society on 19 April 1858.

(2) Volker Mahnert

Muséum d'Histoire Naturelle, Case postale 434, CH-1211 Genève 6, Switzerland

An exact date for the publication of Claparède & Lachman's (1858) work, which included the new name *Schizopus*, has not been easy to find. The archives of the Institut National Genévois were unfortunately destroyed by fire in about 1963 and the university library of Geneva does not have an entry register covering that time. However, an entry in the register of the Société de Physique et d'Histoire naturelle de Genève records receipt of the work from Claparède himself in December 1858. This is apparently the date of publication.

Comment on the proposed conservation of the specific names of *Cynolebias opalescens* and *C. splendens*, both of Myers (1942) (Osteichthyes, Cyprinodontiformes)
(Case 2792; see BZN 49: 207–208)

Anthea Gentry

Secretariat, International Commission on Zoological Nomenclature

The authors of the application, Drs Ferraris and Lazara, have written (30 May 1992) that were it not for the widespread adoption of Myers's (1942) names by government and conservation organisations they would have supported Costa & Lacerda's (1988) adoption of the (1937) Faria & Muller names *fluminensis* and *sandrii*. The authors believe that the case should be decided 'only on the question of whether the widespread adoption of a junior synonym outside of the systematic community is sufficient to justify its continued use'. Some further information is noted below.

The paper (1937) in which Faria & Muller's species were described appeared in a military journal, published between 1937 and 1941 and of limited scientific circulation (see Costa & Lacerda, 1988, p. 128). No type specimens were designated.

In 1942 Myers described *Cynolebias opalescens* and *C. splendens* from seasonal ponds along the base of Serra do Petropolis, State of Rio de Janeiro. Types for both species were designated from specimens in the Natural History Museum, Stanford University, California (*opalescens*: an adult male holotype, catalogue no. 36521, and an adult male and three female paratypes; *splendens*: an adult male holotype, catalogue no. 36527, and three adult male paratypes).

Subsequently, whilst staying in Brazil between 1942 and 1944, Myers became acquainted with Faria & Muller's (1937) paper and agreed with the synonymies, but considered that the earlier work 'was not published according to scientific standards' (Myers, 1944, p. 204; see also Myers, 1952, p. 129). Costa & Lacerda (1988, pp. 127, 128) also recorded that Myers did not accept the validity of the earlier names because he thought that the journal in which they appeared was not available in libraries and was therefore unknown to zoologists. With the exceptions of Lacerda (1987) and Costa & Lacerda (1988), noted in para. 1 of the application, no author has adopted the specific names *fluminensis* and *sandrii* Faria & Muller, 1937.

Additional references

- Myers, G.S. 1944. Field notes of fishes of the vicinity of Rio de Janeiro. *The Aquarium*, 12(12): 204–206.
Myers, G.S. 1952. Annual fishes. *Aquarium Journal*, 23(7): 125–141.

Comments on the proposed conservation of the specific name of *Anniella pulchra* Gray, 1852 and designation of a neotype (Reptilia, Squamata)

(Case 2552; see BZN 48: 316–318; 49: 155–156)

(1) Mark R. Jennings

U.S. Department of the Interior, Fish and Wildlife Service, National Ecology Research Center, P.O. Box 70, San Simeon, California 93452, U.S.A.; Department of Herpetology, California Academy of Sciences, Golden Gate Park, San Francisco, California 94118, U.S.A.

I feel that I am in a unique position to judge the merits of the application by Drs Murphy & Smith and to urge the Commission to approve it. To change the current nomenclature of *Anniella* would cause certain confusion.

Dr Marc P. Hayes (*Portland State University*) and I have recently completed a four-year status report, *Special Concern Amphibians and Reptiles in California*. This document will be widely used by a number of state, federal and local agencies, as well as private consultants. We reviewed the taxonomy, distribution, life history and threats to the legless lizard, *Anniella pulchra*, throughout its known range in California. We found that of the 30 references we cited only one (Bury, 1985; an unpublished report) had adopted the nomenclature proposed by Hunt (1983). Furthermore, of 1,972 museum specimens we examined in 12 U.S. collections only 282 specimens in a single collection were catalogued under Hunt's arrangement. It is clear that nearly all curators and collections managers have resisted relabelling the specimens in their charge.

Information published by Bezy & Wright (1971) and Bezy, Gorman, Kim & Wright (1972) indicates that the taxon currently known as *A. pulchra* consists of at least two distinct taxa. Hopefully, future biochemical and morphological analyses will clarify the relationships of *Anniella* taxa in California. A revision of the group is inevitable and thus the conservation of *A. pulchra* by selection of a neotype is the best course of action.

Additional references

- Bezy, R. & Wright, J. 1971. Karyotypic variation and relationships of the California legless lizard, *Anniella pulchra* Gray (Reptilia, Anniellidae). *Herpetological Review*, 3(4): 71–72.
 Bezy, R., Gorman, G.C., Kim, Y.J. & Wright, J.W. 1972. Chromosomal and genetic divergence in the fossorial lizards of the family Anniellidae. *Systematic Zoology*, 26(1): 57–71.
 Bury, R.B. 1985 (unpublished). Status report: *Anniella pulchra nigra* Fischer, black legless lizard (Anniellidae: Sauria) in central California. Final report for the U.S. Fish and Wildlife Service, Office of Endangered Species, Portland, Oregon, U.S.A.

(2) Robert G. Sprackland

1201 Geraldine Way, Suite 1, 'Reptile Road', Belmont, California 94002, U.S.A.

Despite the validity of the argument on priority, the nomenclature of *Anniella pulchra* Gray, 1852 should follow the pre-Hunt (1983) status because there is over a century of literature on this taxon which is both voluminous and very specific about the animal it addresses. Nomenclature ought to be stable and it therefore seems logical in this case to honour the spirit rather than the letter of the Code.

(3) Hugh Griffith

Department of Integrative Biology, University of California, Berkeley, California 94720, U.S.A.

I write in support of the application to retain the current usage of the name *Anniella pulchra* Gray, 1852.

I believe that the authors are correct in their assertion that the vast majority of herpetologists (systematists and otherwise) understand the widespread mainland California form to be *A. pulchra*. To follow Hunt (1983) and rename this species as a subspecies of *A. nigra* Fischer, 1885 would introduce significant confusion to a vast literature base for the sake of 'correcting' an error which arose from a complex series of events long ago.

I study burrowing lizards, including *Anniella*, and would find it awkward to adopt Hunt's nomenclature, as I am sure would others. I thus support the neotype designation and the other proposals of Murphy & Smith.

(4) Richard G. Zweifel

Department of Herpetology, American Museum of Natural History, Central Park West at 79th Street, New York, N.Y. 10024, U.S.A.

The proposal by Murphy & Smith to designate a neotype and conserve the name *Anniella pulchra* Gray, 1852 has my full support. Promotion of stability of nomenclature is one of the important functions of the Commission and may appropriately be exercised in this case. The taxon has a large literature diverse in subject matter. Change would serve no useful purpose and would be confusing to ecologists and physiologists not likely to be informed regarding current nomenclature.

OPINION 1689

Epizoanthus Gray, 1867 (Cnidaria, Anthozoa): conserved

Ruling

(1) Under the plenary powers the generic name *Sidisia* Gray, 1858 is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The name *Epizoanthus* Gray, 1867 (gender: masculine), type species by monotypy *Dysidea papillosa* Johnston, 1842, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *papillosa* Johnston, 1842, as published in the binomen *Duseideia? papillosa* (specific name of the type species of *Epizoanthus* Gray, 1867), is hereby placed on the Official List of Specific Names in Zoology.

(4) The name *Sidisia* Gray, 1858, as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

History of Case 2750

An application for the conservation of *Epizoanthus* Gray, 1867 was received from Prof J.S. Ryland and Dr A. Muirhead (*University College of Swansea, Swansea, U.K.*) on 5 December 1989. After correspondence the case was published in BZN 48: 19–21 (March 1991). Notice of the case was sent to appropriate journals. A comment in support from Dr Mark J. Grygier (*Seto Marine Biological Laboratory, Wakayama, Japan*) was published in BZN 48: 243 (September 1991).

It was noted on the voting paper that the new species *papillosa* Johnston, 1842 (pp. 190–190, 251, pl. 16, figs. 6, 7) was tentatively included in the new genus *Duseideia* Johnston, 1842, and that *Dysidea?* should therefore be amended to *Duseideia?* in proposal 10(3) on BZN 48: 20.

Johnston (1842, p. 185) established *Duseideia* with two included species, *Spongia fragilis* Montagu, 1818 (p. 114, pl. 14, figs. 1, 2) and *D. papillosa*. Later in the same work (p. 251) Johnston altered the spelling of the generic name to *Dysidea*. Bowerbank (1864), acting as first revisor, adopted the spelling *Dysidea* and *Duseideia* has not subsequently been used. deLaubenfels (1948) designated *Spongia fragilis* Montagu as the type species of *Dysidea*. The names *Dysidea* Johnston, 1842 and *Spongia fragilis* Montagu, 1818 were placed on Official Lists in Opinion 1550 (September 1989); *Duseideia* Johnston, 1842 (an incorrect original spelling of *Dysidea*) was placed on the Official Index in the same Opinion.

In a note on *Dysidea papillosa*, Bowerbank (1866, p. 384) placed the species in the ZOANTHIDAE (Anthozoa) and recorded that 'Dr Johnston...expresses his doubts of its being truly a sponge'.

Additional references

- Bowerbank, J.S. 1864, 1866. *A monograph of the British Spongiadae*, vol. 1, xx, 290 pp. (1864); vol. 2, 388 pp. (1866). Ray Society, London.
- deLaubenfels, M.W. 1948. The order Keratosa of the phylum Porifera — a monographic study. *Occasional Papers of the Allan Hancock Foundation*, 3: 1–217.

Montagu, G. 1818. An essay on sponges, with descriptions of all the species that have been discovered on the coast of Great Britain. *Memoirs of the Wernerian Natural History Society*, 2: 67–122.

Decision of the Commission

On 1 March 1992 the members of the Commission were invited to vote on the proposals published in BZN 48: 20. At the close of the voting period on 1 June 1992 the votes were as follows:

Affirmative votes — 28: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 1: Kabata.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

Epizoanthus Gray, 1867, *Proceedings of the Zoological Society of London*, 1867: 237.

papillosa, Duseideia, Johnston, 1842, *A history of the British sponges and lithophytes*, p. 190.

Sidisia Gray, 1858, *Proceedings of the Zoological Society of London*, 1858: 532.

OPINION 1690

Helix (Helicigona) barbata Férussac, 1832 (currently *Lindholmiola barbata*; Mollusca, Gastropoda): lectotype designation confirmed

Ruling

(1) It is hereby confirmed that the name *Helix (Helicigona) barbata* is first available from Férussac (1832) and not from Férussac (1821).

(2) Under the plenary powers it is hereby confirmed that the specimen figured and named as *H. (H.) barbata* var. *a* by Férussac (1832, pl. 66*, fig. 3 and explanation), designated by Gittenberger & Groh (1986), is the lectotype of the nominal species *Helix (Helicigona) barbata* Férussac, 1832.

(3) The name *barbata* Férussac, 1832, as published in the binomen *Helix (Helicigona) barbata* and as defined by the lectotype designated by Gittenberger & Groh (1986), confirmed in (2) above, is hereby placed on the Official List of Specific Names in Zoology.

History of Case 2630

An application for the confirmation of the lectotype designation of *Helix (Helicigona) barbata* Férussac, 1832 was received from Mr D. Kadolsky (Ewell, Surrey, U.K.) on 20 November 1987. After correspondence the case was published in 47: 101–103 (June 1990). Notice of the case was sent to appropriate journals.

A comment by Prof Edmund Gittenberger (*Nationaal Natuurhistorisch Museum, Leiden, The Netherlands*), published in BZN 48: 53 (March 1991), supported placing on the Official List the specific name of *Helix barbata* Férussac defined by the lectotype designated by Gittenberger & Groh (1986): the specimen figured in Férussac's (1832) plate 66*, fig. 3. However, Prof Gittenberger disputed the date of availability cited for the name in the application (i.e. 1832). A reply by Mr Kadolsky, published in BZN 48: 243–244 (September 1991), reiterated that *H. barbata* was first made available in 1832 by the publication of Férussac's plate and explanation, and not in 1821.

A further comment, published in BZN 48: 244, noted that in Opinion 336 (March 1955) *Helix lens* Férussac, 1832 (fig. 2 on pl. 66*; not pl. 66, as given on BZN 10: 99, which illustrated different species and was subsequently renumbered as pl. 76) had been placed on the Official List; proposals (3) and (4)(b) on BZN 47: 103, para. 8 were therefore withdrawn from the application.

Decision of the Commission

On 1 March 1992 the members of the Commission were invited to vote on the proposals published in BZN 47: 103, with the withdrawals noted above. At the close of the voting period on 1 June 1992 the votes were as follows:

Affirmative votes — 26: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Dupuis, Hahn, Heppell, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 3: Halvorsen, Holthuis and Ride.

Holthuis and Ride considered that the name *barbata* had been made available in 1821.

Original references

The following is the original reference to the name placed on an Official List by the ruling given in the present Opinion:

barbata, *Helix* (*Helicigona*), Férussac, 1832, *Histoire naturelle générale et particulière des mollusques terrestres et fluviatiles*, Explication des planches des livraisons 22–27; pl. 66*, fig. 3.

The following is the reference for the designation of the lectotype of *Helix* (*Helicigona*) *barbata* Férussac, 1832:

Gittenberger, E. & Groh, K. 1986. *Archiv für Molluskenkunde*, **116**: 222.

OPINION 1691

***Polygyra* Say, 1818 (Mollusca, Gastropoda): *Polygyra septemvolva* Say, 1818 designated as the type species, and POLYGYRIDAE Pilsbry, 1895 given precedence over MESODONTIDAE Tryon, 1866**

Ruling

- (1) Under the plenary powers:
 - (a) all fixations of type species for the nominal genus *Polygyra* Say, 1818 prior to the designation by Herrmannsen (1847) of *Polygyra septemvolva* Say, 1818 are hereby set aside;
 - (b) POLYGYRIDAE Pilsbry, 1895 and other family-group names based on *Polygyra* Say, 1818 are hereby given precedence over MESODONTIDAE Tryon, 1866 and other family-group names based on *Mesodon* Férussac, 1821 whenever their type genera are placed in the same family-group taxon.

(2) The following names are hereby placed on the Official List of Generic Names in Zoology:

- (a) *Polygyra* Say, 1818 (gender: feminine), type species by subsequent designation by Herrmannsen (1847) *Polygyra septemvolva* Say, 1818, as ruled in (1)(a) above;
- (b) *Mesodon* Férussac, 1821 (gender: masculine), type species by monotypy *Helix thyroidus* Say, 1817.

(3) The following names are hereby placed on the Official List of Specific Names in Zoology:

- (a) *septemvolva* Say, 1818, as published in the binomen *Polygyra septemvolva* (specific name of the type species of *Polygyra* Say, 1818);
- (b) *thyroidus* Say, 1817, as published in the binomen *Helix thyroidus* (specific name of the type species of *Mesodon* Férussac, 1821).

(4) The following names are hereby placed on the Official List of Family-Group Names in Zoology:

- (a) POLYGYRIDAE Pilsbry, 1895 (type genus *Polygyra* Say, 1818) with the endorsement that it and other family-group names based on *Polygyra* are to be given precedence over MESODONTIDAE Tryon, 1866 (type genus *Mesodon* Férussac, 1821) and other family-group names based on *Mesodon* whenever their type genera are placed in the same family-group taxon;
- (b) MESODONTIDAE Tryon, 1866 (type genus *Mesodon* Férussac, 1821) with the endorsement that it and other family-group names based on *Mesodon* are not to be given priority over POLYGYRIDAE Pilsbry, 1895 and other family-group names based on *Polygyra* Say, 1818 whenever their type genera are placed in the same family-group taxon.

History of Case 2642

An application for the conservation of the family-group name POLYGYRIDAE Pilsbry, 1895 by giving it precedence over MESODONTIDAE Tryon, 1866 was received from Dr K.C. Emberton (*Academy of Natural Sciences, Philadelphia, Pennsylvania, U.S.A.*) on 8 February 1988. After correspondence the case was published in BZN 46: 94–96 (June 1989). Notice of the case was sent to appropriate journals.

A comment from Drs G. Rosenberg (*Academy of Natural Sciences, Philadelphia, Pennsylvania, U.S.A.*) & K.C. Emberton, published in BZN 47: 204–205 (September

1990), noted that the generic name *Mesodon* was first published by Férussac (1821) in synonymy, and that authorship of the name is correctly ascribed to Férussac (1821) (Article 50g of the Code, cf. paras. 1 and 8 of the application).

The application received the necessary two-thirds majority for approval when voted on by the Commission. However, Mr David Heppell, voting in favour, pointed out on his voting paper that the type species of the type genus *Polygyra* Say, 1818 was *P. auriculata* Say, 1818 by Gray's (November 1847) designation, and not *P. septemvolva* Say, 1818 as stated in the application. He also noted that the correct date for the publication of the name POLYGYRIDAE is 1895 (not 1894 as previously stated). A further proposal (BZN 48: 141–142; June 1991) sought to set aside Gray's designation in favour of the accepted type species for *Polygyra*, *P. septemvolva* Say, 1818, designated by Herrmannsen (December 1847) (see BZN 46: 95). Approval of this further proposal has allowed the ruling on the case to be completed and a combined Opinion to be published.

Decision of the Commission

On 1 December 1990 the members of the Commission were invited to vote on the proposals published in BZN 46: 95, with the amendment to the authorship (Férussac, 1821) of the name *Mesodon* noted above. At the close of the voting period on 1 March 1991 the votes were as follows:

Affirmative votes — 26: Bayer, Bock, Cocks, Cogger, Corliss, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Mroczkowski, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Trjapitzin, Uéno, Willink

Negative votes — 1: Thompson.

Dupuis abstained.

On 1 March 1992 the members of the Commission were invited to vote on the proposal published in BZN 48: 142. At the close of the voting period on 1 June 1992 the votes were as follows:

Affirmative votes — 29: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — none.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

Mesodon Férussac, 1821, *Tableaux systématiques des animaux mollusques... suivis d'un prodrome général...*, part 2, p. 37 (folio), p. 33 (quarto).

MESODONTIDAE Tryon, 1866, *American Journal of Conchology*, 2: 306.

Polygyra Say, 1818, *Journal of the Academy of Natural Sciences of Philadelphia*, 1(10): 276.

POLYGYRIDAE Pilsbry, 1895, *Manual of Conchology*, series 2 (Pulmonata), vol. 9, p. xxxii.

septemvolva, *Polygyra*, Say, 1818, *Journal of the Academy of Natural Sciences of Philadelphia*, 1(10): 278.

thyroidus, *Helix*, Say, 1817, *Journal of the Academy of Natural Sciences of Philadelphia*, 1(6): 123.

The following is the reference for the designation of *Polygyra septemvolva* Say, 1818 as the type species of the nominal genus *Polygyra* Say, 1818:

Herrmannsen, A.N. 1847. *Indicus generum Malacozoorum primordia*, vol. 2, p. 317.

OPINION 1692

Phyllodoce Lamarck, 1818 and *Polyodontes* de Blainville, 1828 (Annelida, Polychaeta): conserved

Ruling

(1) Under the plenary powers the generic name *Phyllodoce* Ranzani, 1817, and all uses of the name *Phyllodoce* prior to the publication of *Phyllodoce* Lamarck, 1818, are hereby suppressed for the purposes of both the Principle of Priority and the Principle of Homonymy.

(2) The following names are hereby placed on the Official List of Generic Names in Zoology:

(a) *Phyllodoce* Lamarck, 1818 (gender: feminine), type species by monotypy *Phyllodoce laminosa* Lamarck, 1818;

(b) *Polyodontes* de Blainville, 1828 (gender: masculine), type species by monotypy *Phyllodoce maxillosa* Ranzani, 1817.

(3) The following names are hereby placed on the Official List of Specific Names in Zoology:

(a) *laminosa* Lamarck, 1818, as published in the binomen *Phyllodoce laminosa* (specific name of the type species of *Phyllodoce* Lamarck, 1818);

(b) *maxillosa* Ranzani, 1817, as published in the binomen *Phyllodoce maxillosa* (specific name of the type species of *Polyodontes* de Blainville, 1828).

(4) The name PHYLLODOCIDAE Örsted, 1843 (type genus *Phyllodoce* Lamarck, 1818) is hereby placed on the Official List of Family-Group Names in Zoology.

(5) The name *Phyllodoce* Ranzani, 1817, as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

History of Case 2765

An application for the conservation of *Phyllodoce* Lamarck, 1818 and *Polyodontes* de Blainville, 1828 was received from Dr Fredrik Pleijel (*Swedish Museum of Natural History, Stockholm, Sweden*) on 12 March 1990. After correspondence the case was published in BZN 48: 100–102 (June 1991). Notice of the case was sent to appropriate journals. No comments were received.

It was noted on the voting paper that the publication by Pleijel (1991) recorded as 'in press' in para. 3 of the application had subsequently been published: *Zoologica Scripta*, 20: 225–261.

Decision of the Commission

On 1 March 1992 the members of the Commission were invited to vote on the proposals published in BZN 48: 101. At the close of the voting period on 1 June 1992 the votes were as follows:

Affirmative votes — 28: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Trjapitzin, Uéno, Willink

Negative votes — 1: Thompson.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

laminosa, Phyllodoce, Lamarck, 1818, *Histoire naturelle des animaux sans vertèbres*, vol. 5, p. 316.

maxillosa, Phyllodoce, Ranzani, 1817, *Opuscoli Scientifici*, Bologna, 1(2): 109.

Phyllodoce Lamarck, 1818, *Histoire naturelle des animaux sans vertèbres*, vol. 5, p. 316.

Phyllodoce Ranzani, 1817, *Opuscoli Scientifici*, Bologna, 1(2): 109.

PHYLLODOCIDAE Örsted, 1843, *Annulatorum danicorum conspectus*, fasc. 1 (Maricolae), p. 25.

Polyodontes de Blainville, 1828, in Levrault, F.G. (Ed.), *Dictionnaire des sciences naturelles*, vol. 57 (VEC-VER), p. 461.

OPINION 1693

***Coccinella undecimnotata* Schneider, [1792] (currently *Hippodamia* (*Semiadalia*) *undecimnotata*; Insecta, Coleoptera): specific name conserved**

Ruling

(1) Under the plenary powers the following specific names are hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:

- (a) *oculata* Thunberg, 1781, as published in the binomen *Coccinella oculata*;
- (b) *circularis* Olivier, 1791, as published in the binomen *Coccinella circularis*.

(2) The name *undecimnotata* Schneider, [1792], as published in the binomen *Coccinella undecimnotata*, is hereby placed on the Official List of Specific Names in Zoology.

(3) The following names are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology:

- (a) *oculata* Thunberg, 1781, as published in the binomen *Coccinella oculata* and as defined by the lectotype designated by Pope (1987), suppressed in (1)(a) above;
- (b) *circularis* Olivier, 1791, as published in the binomen *Coccinella circularis*, suppressed in (1)(b) above.

History of Case 2763

An application for the conservation of the specific name of *Coccinella undecimnotata* Schneider, [1792] was received from Mr Robert D. Pope (c/o *The Natural History Museum, London, U.K.*) on 6 March 1990. After correspondence the case was published in BZN 48: 38–40 (March 1991). Notice of the case was sent to appropriate journals. No comments were received.

Decision of the Commission

On 1 December 1991 the members of the Commission were invited to vote on the proposals published in BZN 48: 39. At the close of the voting period on 1 March 1992 the votes were as follows:

Affirmative votes — 27: Bayer, Bock, Bouchet, Cocks, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 2: Cogger and Lehtinen.

Cogger commented that he did not accept the argument that a neotype designation for *Coccinella undecimnotata* Schneider, [1792] was not justified (para. 1 of the application); he considered that to reject names in order to conserve another name which has no extant type material was to invite further dispute and instability. Lehtinen also commented that the existence of type material was essential in taxonomic work; when making a choice between a name with a type and one without, arguments in favour of the latter had to be really strong.

Original references

The following are the original references to the names placed on an Official List and an Official Index by the ruling given in the present Opinion:

- circularis*, *Coccinella*, Olivier, 1791, *Encyclopédie Méthodique. Histoire Naturelle. Insectes*, vol. 6, p. 62.
oculata, *Coccinella*, Thunberg, 1781, *Dissertatio entomologica. Novas Insectorum Species sistens*, part 1, p. 14.
undecimnotata, *Coccinella*, Schneider, [1792], *Neuestes Magazin für die Liebhaber der Entomologie*, 1(3): 379.

The following is the reference for the designation of the lectotype of *Coccinella oculata* Thunberg, 1781:

- Pope, R.D.** 1987. *Entomologica Scandinavica*, 18(1): 61.

OPINION 1694

Rhinapion Beguin-Billecocq, 1905 (Insecta, Coleoptera): conserved

Ruling

(1) Under the plenary powers the generic name *Rhinapion* Motschulsky, 1868, and all uses of the name *Rhinapion* prior to the publication of *Rhinapion* Beguin-Billecocq (1905), are hereby suppressed for the purposes of both the Principle of Priority and the Principle of Homonymy.

(2) The name *Rhinapion* Beguin-Billecocq, 1905 (gender: neuter), type species by subsequent designation by Kissinger (1968) *Apion* (*Rhinapion*) *pauxillum* Beguin-Billecocq, 1905, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *pauxillum* Beguin-Billecocq, 1905, as published in the binomen *Apion* (*Rhinapion*) *pauxillum* (specific name of the type species of *Rhinapion* Beguin-Billecocq, 1905), is hereby placed on the Official List of Specific Names in Zoology.

(4) The name *Rhinapion* Motschulsky, 1868, as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

History of Case 2757

An application for the conservation of *Rhinapion* Beguin-Billecocq, 1905 was received from Drs M.A. Alonso-Zarazaga (*Museo Nacional de Ciencias Naturales, Madrid, Spain*) and M. Wanat (*Muzeum Przyrodnicze, Uniwersytet Wroclawski, Wroclaw, Poland*) on 5 February 1990. After correspondence the case was published in BZN 48: 135–136 (June 1991). Notice of the case was sent to appropriate journals.

A comment by one of the authors, Dr M.A. Alonso-Zarazaga, published in BZN 48: 324 (December 1991), amplified the application. He noted that there is no known synonym or replacement name for *Rhinapion* Beguin-Billecocq, and to invent one would upset the established nomenclature of the taxon. He also noted that new species of economic importance are awaiting description.

Decision of the Commission

On 1 March 1992 the members of the Commission were invited to vote on the proposals published in BZN 48: 136. At the close of the voting period on 1 June 1992 the votes were as follows:

Affirmative votes — 26: Bayer, Bock, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Trjapitzin, Uéno, Willink

Negative votes — 3: Bouchet, Holthuis and Thompson.

Bouchet commented that since the name *Rhinapion* Beguin-Billecocq, 1905 had apparently not been much used since its description a replacement name could have been proposed without upsetting the nomenclature.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

pauxillum, *Apion* (*Rhinapion*), Beguin-Billecocq, 1905, *Annales de la Société Entomologique de France*, 74: 147.

Rhinapion Beguin-Billecocq, 1905, *Annales de la Société Entomologique de France*, **74**: 147.
Rhinapion Motschulsky, 1868, *Horae Societatis Entomologicae Rossicae*, **6**(supplement): 86.

The following is the reference for the designation of *Apion* (*Rhinapion*) *pauvillum* Beguin-Billecocq, 1905 as the type species of the nominal genus *Rhinapion* Beguin-Billecocq, 1905:

Kissinger, D.G. 1968. *Curculionidae subfamily Apioninae of North and Central America with reviews of the world genera of Apioninae and world subgenera of Apion Herbst (Coleoptera)*, p. 28.

OPINION 1695

Acanthophthalmus van Hasselt in Temminck, 1824 (Osteichthyes, Cypriniformes): not conserved

Ruling

(1) The name *Pangio* Blyth, 1860 (gender: feminine), type species by monotypy *Cobitis cinnamomea* McClelland, 1839 (an unnecessary replacement name for *C. pangia* Hamilton, 1822), is hereby placed on the Official List of Generic Names in Zoology.

(2) The name *pangia* Hamilton, 1822, as published in the binomen *Cobitis pangia* (senior objective synonym of the specific name of *Cobitis cinnamomea* McClelland, 1839, the type species of *Pangio* Blyth, 1860), is hereby placed on the Official List of Specific Names in Zoology.

(3) The name *Acanthophthalmus* van Hasselt in Temminck, 1824 is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology (a junior objective synonym of *Cobitis* Linnaeus, 1758).

History of Case 2738

An application for the conservation of *Acanthophthalmus* van Hasselt in Temminck, 1824, and the designation of *Cobitis kuhlii* Valenciennes in Cuvier & Valenciennes, 1846 as the type species, was received from Drs Mary E. BurrIDGE (*Royal Ontario Museum, Toronto, Canada*), Darrell J. Siebert (*The Natural History Museum, London, U.K.*) and Carl Ferraris (*American Museum of Natural History, New York, U.S.A.*) on 30 August 1989. After correspondence the case was published in BZN 47: 118–121 (June 1990). Notice of the case was sent to appropriate journals.

Opposing comments from Drs Peter K.L. Ng, Angus D. Munro & Kelvin K.P. Lim (*National University of Singapore, Singapore*) and from Dr Maurice Kottelat (*Zoologische Staatssammlung, München, Germany*) were published in BZN 48: 59–62 (March 1991). A reply by one of the authors of the application, Dr Darrell J. Siebert, was published at the same time (BZN 48: 63–64), together with a comment in support from Drs Harro Hieronimus (*Solingen, Germany*), Jürgen Schmidt (*Kamen, Germany*) & Christian P. Steinle (*Neuenburg, Germany*).

A list of the additional representative references demonstrating usage of the generic name *Acanthophthalmus* van Hasselt, 1824 was published in BZN 48: 64–65.

Opposing comments from Dr Rohan Pethiyagoda (*The Wildlife Heritage Trust of Sri Lanka, Colombo, Sri Lanka*) and from Dr Rainer Stawikowski (*Gelsenkirchen, Germany*) were published in BZN 48: 251–253 (September 1991).

It was noted on the voting paper that an opposing comment had also been received from Prof J.S. Nelson (*University of Alberta, Edmonton, Canada*), who wrote: 'I feel that the interests of zoological nomenclature would be best served by staying with *Pangio* Blyth, 1860 as the name for what have become known as the kuhli loaches'.

It was also noted on the voting paper that until 1987 *Cobitis* Linnaeus, 1758 and *Acanthophthalmus* were in long-established use in the sense of having *C. taenia* Linnaeus, 1758 and *C. kuhlii* Valenciennes, 1846 as the respective type species, both by designation by Bleeker (1863, pp. 362 and 364). In neither case were these designations formally valid, and in 1986 Dr M. Kottelat applied for the conservation of *C. taenia* as

the type species of *Cobitis* (BZN 43: 360–362). This was confirmed in Opinion 1500 (June 1988). Dr Kottelat did not, however, seek to conserve *Acanthopthalmus* (which formally has *C. taenia* as the type species; see BZN 47: 118, para. 1), and in 1987 he introduced usage of the junior subjective synonym *Pangio* Blyth, 1869 (see BZN 47: 119, para. 6) to replace *Acanthopthalmus* auctt. (i.e. sensu *C. kuhlii*). This course was followed by many but not all authors.

In a recent publication on *Acanthopthalmus kuhlii* (Valenciennes, 1846), BurrIDGE (1992, p. 182) designated a neotype for the species: specimen no. RMNH 2688 in the Nationaal Natuurhistorisch Museum, Leiden, The Netherlands, collected by S. Müller in Java between 1826 and 1832 or 1836.

The original application (BZN 47: 118–121) sought the conservation of *Acanthopthalmus* van Hasselt, 1824 for the kuhli loaches, with the designation of *Cobitis kuhlii* as the type species and the suppression of the (unused) earliest spelling *Acanthopthalmus* van Hasselt, 1823 (placed on the Official Index in Opinion 1500 as a junior objective synonym of *Cobitis*). This course (proposal A) required the use of the plenary powers. The alternative course was to use *Pangio* Blyth, 1860 (Proposal B; BZN 48: 252); *Acanthopthalmus* would remain a junior objective synonym of *Cobitis*.

Additional reference

BurrIDGE, M.E. 1992. Systematics of the *Acanthopthalmus kuhlii* complex (Teleostei: Cobitidae), with the description of a new species from Sarawak and Brunei. *Copeia*, 1992(1): 172–186.

Decision of the Commission

On 1 March 1992 the members of the Commission were invited to vote. At the close of the voting period on 1 June 1992 the votes were as follows:

Proposal A — 8: Bock, Corliss, Dupuis, Kraus, Savage, Starobogatov, Trjapitzin and Willink.

Proposal B — 21: Bayer, Bouchet, Cocks, Cogger, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Schuster, Štys, Thompson and Uéno.

Ride commented that he considered that the usage of *Pangio* Blyth, 1860 since 1987 could not be ignored. Kottelat (1987) had made an adequate case (subsequently supported by others) when he introduced the name, and the state of taxonomy in the group was such that its introduction would not affect stability, disturb universality or cause confusion, and its continued use was therefore justified.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

Acanthopthalmus van Hasselt, 1824, in Temminck, C.J., *Bulletin des Sciences Naturelles et de Zoologie*, 2(Zoologie): 376.

pangia, *Cobitis*, Hamilton (formerly Buchanan), 1822, *An account of the fishes found in the river Ganges and its branches*, p. 355.

Pangio Blyth, 1860, *Journal of the Asiatic Society of Bengal*, 29: 169.

OPINION 1696

HYDROBATIDAE Mathews, 1912 (1865) (Aves, Procellariiformes): conserved

Ruling

- (1) Under the plenary powers:
 - (a) the name *Hydrobata* Vieillot, 1816 is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
 - (b) HYDROBATIDAE Degland, 1849 and other family-group names based on *Hydrobata* Vieillot, 1816 are hereby ruled to be unavailable because the name of that nominal genus has been suppressed in (1)(a) above.
- (2) The name *Hydrobates* Boie, 1822 (gender: masculine), type species by subsequent designation by Baird, Brewer & Ridgway (1884) *Procellaria pelagica* Linnaeus, 1758, is hereby placed on the Official List of Generic Names in Zoology.
- (3) The name *pelagica* Linnaeus, 1758, as published in the binomen *Procellaria pelagica* (specific name of the type species of *Hydrobates* Boie, 1822), is hereby placed on the Official List of Specific Names in Zoology.
- (4) The name HYDROBATIDAE Mathews, 1912 (1865) (type genus *Hydrobates* Boie, 1822) is hereby placed on the Official List of Family-Group Names in Zoology, with an endorsement that it takes the precedence of the replaced family-group name THALASSIDROMIDAE von Müller, 1865.
- (5) The name *Hydrobata* Vieillot, 1816, as suppressed in (1)(a) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.
- (6) The name HYDROBATIDAE Degland, 1849, ruled in (1)(b) above to be unavailable because the name of the type genus *Hydrobata* Vieillot, 1816 has been suppressed, is hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology.

History of Case 2024

An application to conserve HYDROBATIDAE Mathews, 1912 (1865) as the family name for the storm petrels was formulated by Mr R.V. Melville (former Secretary to the Commission) and published in BZN 42: 398–400 (December 1985). Mr Melville was considerably assisted in the preparation of the application by the late Dr Eugene Eisenmann (*American Museum of Natural History, New York, U.S.A.*), by Drs Chr. Jouanin & J.-L. Mougin (*Muséum National d'Histoire Naturelle, Paris, France*), and subsequently by Dr W.R.P. Bourne (*University of Aberdeen, Aberdeen, Scotland*) and Dr John Warham (*University of Canterbury, Christchurch, New Zealand*). Dr Eisenmann supplied a list of 29 major ornithological books in which the family-group name HYDROBATIDAE had been adopted, demonstrating the world-wide usage of the name. Notice of the case was sent to appropriate journals.

An opposing comment from Dr Storrs L. Olson (*National Museum of Natural History, Smithsonian Institution, Washington, D.C., U.S.A.*) was published in BZN 44: 44–45 (March 1987). A comment in support from Dr Bourne was published in BZN 45: 221–222 (September 1988). Prof Walter J. Bock (Chairman of the Standing Committee of the International Ornithological Congress (SCON), *Columbia University, New York*,

U.S.A.) reported on the support for the application following a Congress meeting in December 1990 (published in BZN 48: 158–160; June 1991).

It was noted on the voting paper that further comments in support had been received from Dr Noël Mayaud (*École Normale Supérieure, 46 rue d'Ulm, Paris, France*) and Dr Warham. The latter gave a list of 13 works using HYDROBATIDAE Mathews for the storm petrels; some of these had been mentioned by Dr Bourne.

The simplified proposals on BZN 48: 160–161 replaced those on BZN 42: 399–400; they differed only in (i) the suppression of the objectively invalid generic name *Hydrobata* Vieillot, 1816 for the dippers in order to dispose of HYDROBATIDAE Degland, 1849 and (ii) the omission of action concerning *Oceanites* and *Thalassidroma* and the family-group names OCEANITIDAE Forbes, 1881 and THALASSIDROMIDAE von Müller, 1865, since this was not necessary. As pointed out by Prof Bock (BZN 48: 159, line 5) OCEANITINAE is available for a subfamily (the long-legged storm petrels).

Decision of the Commission

On 1 March 1992 the members of the Commission were invited to vote on the proposals published in BZN 48: 160–161. At the close of the voting period on 1 June 1992 the votes were as follows:

Affirmative votes — 27: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Hahn, Halvorsen, Heppell, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 2: Dupuis and Holthuis.

Original references

The following are the original references to the names placed on Official Lists and Official Indexes by the ruling given in the present Opinion:

Hydrobata Vieillot, 1816, *Analyse d'une nouvelle ornithologie élémentaire*, p. 42.

Hydrobates Boie, 1822, *Isis* (von Oken), col. 562.

HYDROBATIDAE Degland, 1849, *Ornithologie européenne, ou catalogue analytique et raisonné des oiseaux observés en Europe*, vol. 1, p. 445.

HYDROBATIDAE Mathews, 1912, *Birds of Australia*, vol. 2, part 1, p. 9.

pelagica, *Procellaria*, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 131.

The following is the reference for the designation of *Procellaria pelagica* Linnaeus, 1758 as the type species of the nominal genus *Hydrobates* Boie, 1822:

Baird, S.F., Brewer, T.M. & Ridgway, R. 1884. *Memoirs of the Museum of Comparative Zoology, at Harvard College, Cambridge, Mass.*, 13: 403.

INSTRUCTIONS TO AUTHORS

The following notes are primarily for those preparing applications to the Commission; other authors should comply with the relevant sections. Applications should be prepared in the format of recent parts of the Bulletin; the Commission's Secretariat reserves the right to return applications not so prepared.

Text. Typed in double spacing, this should consist of numbered paragraphs setting out the details of the case and leading to a final paragraph of formal proposals. Text references should give dates and page numbers in parentheses, e.g. 'Daudin (1800, p. 39) described ...'. The Abstract will be prepared by the Secretariat.

References. These should be given for all authors cited. The title of periodicals should be in full and be underlined; numbers of volumes, parts, etc. should be in arabic figures, separated by a colon from page numbers. Book titles should be underlined and followed by the number of pages, the publisher and place of publication.

Submission of Application. Two copies should be sent to: The Executive Secretary, the International Commission on Zoological Nomenclature, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. It would help to reduce the time that it takes to process the large number of applications received if the typescript could be accompanied by a disk with copy in ASCII text in IBM PC format. It would also be helpful if applications were accompanied by photocopies of relevant pages of the main references where this is possible.

Applicants would be well advised to discuss their cases with other workers in the same field before submitting applications, so that they are aware of any wider implications and the likely reactions of other zoologists.

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The Bulletin of Zoological Nomenclature

*[ICZN] The Official Periodical
of the International Commission
on Zoological Nomenclature*

THE BULLETIN OF ZOOLOGICAL NOMENCLATURE

The *Bulletin* is published four times a year for the International Commission on Zoological Nomenclature by the International Trust for Zoological Nomenclature, a charity (no. 211944) registered in England. The annual subscription for 1992 is £75 or \$145, postage included; the rate for 1993 will be £80 or \$155. All manuscripts, letters and orders should be sent to:

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BULLETIN OF ZOOLOGICAL NOMENCLATURE

Volume 49, part 4 (pp. 253–308)

17 December 1992

Notices

(a) *Invitation to comment.* The Commission is authorised to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after their publication but this period is normally extended to enable comments to be submitted. Any zoologist who wishes to comment on any of the applications is invited to send his contribution to the Executive Secretary of the Commission as quickly as possible.

(b) *Invitation to contribute general articles.* At present the *Bulletin* comprises mainly applications concerning names of particular animals or groups of animals, resulting comments and the Commission's eventual rulings (Opinions). Proposed amendments to the Code are also published for discussion.

Articles or notes of a more general nature are actively welcomed provided that they raise nomenclatural issues, although they may well deal with taxonomic matters for illustrative purposes. It should be the aim of such contributions to interest an audience wider than some small group of specialists.

(c) *Receipt of new applications.* The following new applications have been received since going to press for volume 49, part 3 (published on 30 September 1992). Under Article 80 of the Code, existing usage is to be maintained until the ruling of the Commission is published.

- (1) *Psittacus banksii* Latham, 1790 and *P. lathamii* Temminck, 1807 (currently *Calyptorhynchus banksii* and *C. lathamii*; Aves, Psittaciformes): proposed conservation of the specific names. (Case 2856). R. Schodde & W.J. Bock.
- (2) *Scelidosaurus harrisonii* Owen, 1861 (Reptilia, Ornithischia): proposed replacement of the lectotype. (Case 2857). A.J. Charig & B.H. Newman.
- (3) *Hydrophoria* Robineau-Desvoidy, 1830 (Insecta, Diptera): proposed designation of *Musca lancifer* Harris, 1780 as the type species. (Case 2858). G.C.D. Griffiths.
- (4) *Johnstonia* Quatrefages, 1866 (Annelida, Polychaeta): proposed conservation. (Case 2859). A.S.Y. Mackie & J. Gobin.
- (5) *Pleurotoma meneghinii* Mayer, 1868 (currently *Asthenotoma meneghinii*; Mollusca, Gastropoda): proposed replacement of neotype by rediscovered lectotype. (Case 2860). R. Gatto.
- (6) *ELMIDAE* Curtis, 1830 and *Elmis* Latreille, 1802 (Insecta, Coleoptera): proposed conservation as correct spelling and of feminine gender respectively. (Case 2861). M.A. Jäch.
- (7) A.A.H. Lichtenstein's (1796, 1797) *Catalogus musei zoologici... Sectio tertia. Continens Insecta* and D.H. Schneider's (1800) *Verzeichniss einer Parthei Insekten ...*: proposed suppression with conservation of some Lichtenstein (1796) names (Insecta, Arachnida, Crustacea). (Case 2862). I.M. Kerzhner.

(d) *Ruling of the Commission.* Each Opinion, Declaration or Direction published in the *Bulletin* constitutes an official ruling of the International Commission on Zoological Nomenclature, by virtue of the votes recorded, and comes into force on the day of publication of the *Bulletin*.

The European Association for Zoological Nomenclature

The European Association for Zoological Nomenclature has recently been established to facilitate liaison between European zoologists and the Commission, and to support the Commission's work. Members will receive a yearly Newsletter with information on the activities of the Association and Commission, and will be able to buy the *Code* and the *Official Lists and Indexes* at substantial discounts.

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The International Code of Zoological Nomenclature

The Third Edition (published 1985) supersedes all earlier versions and incorporates many changes.

Copies may be ordered from I.T.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. or A.A.N.Z., c/o NHB Stop 163, National Museum of Natural History, Washington D.C. 20560, U.S.A. The cost is £19 or \$35, but members of the American Association for Zoological Nomenclature or the European Association for Zoological Nomenclature are offered the reduced price of £15 or \$29; payment should accompany orders.

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The Official Lists and Indexes of Names and Works in Zoology was published in 1987. This book gives details of all the names and works on which the Commission has ruled since it was set up in 1895; there are about 9,900 entries.

Copies can be ordered from I.T.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. or A.A.Z.N., c/o NHB Stop 163, National Museum of Natural History, Washington, D.C. 20560, U.S.A. The cost is £60 or \$110, but members of the American Association for Zoological Nomenclature or the European Association for Zoological Nomenclature are offered the reduced price of £40 or \$75; payment should accompany orders.

In the five years 1986–1990, 946 names and five works were added to the Official Lists and Official Indexes. A supplement has been prepared giving these additional entries,

together with some amendments and updatings to entries in the 1987 volume. Copies can be obtained without charge from either of the above addresses.

Bulletin of Zoological Nomenclature — Crustacea and Mollusca Offprints

The International Trust for Zoological Nomenclature is offering a subscription for individual zoologists wishing to receive offprints of all cases in particular disciplines. For an annual payment of £15 or \$25 subscribers will receive copies of all Applications, Comments and Opinions relating to either the Crustacea or Mollusca as soon as they are published in the *Bulletin of Zoological Nomenclature*. Offprints are available back to 1980.

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Bulletin of Zoological Nomenclature — Back Copies

Back copies of all the volumes of the *Bulletin*, and of most volumes of the *Opinions and Declarations* that were published concurrently with vols. 1–16 of the *Bulletin*, are still available. Prices on application to I.T.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K.

International Trust for Zoological Nomenclature

Financial Report for 1991

Unfortunately 1991 was a year of decreasing income and increasing costs, the result of which was that the Trust made a loss of £8,112 for the year. This is nearly 13% of the income for the year, and is a large increase on the deficit of £1,324 (2% of the income) for the previous year.

Nearly half the Trust's income came from sales of publications. The *Bulletin of Zoological Nomenclature* yielded an income of £25,482, an increase of £1,585 on the previous year. The *International Code of Zoological Nomenclature* and the *Official Lists and Indexes* produced £3,100 (down by £1,722), giving a total income from publications of £28,582, a small decrease of £137. Income from grants remained at £9,000, but the amounts received from donations (£14,348) and investment interest (£11,424) were down by £1,244 and £802 respectively. The total income for the year was £63,552, a decrease of £2,320 from 1990.

The main expenditure of the Trust in 1991 was £57,791 for salaries and National Insurance of the Secretariat of the International Commission on Zoological Nomenclature; the increase of £7,404 was mainly because one full-time post had been vacant for much of the previous year. Printing and distribution of the *Bulletin* and postage on sale of other publications amounted to £9,422. General expenses (£3,463), audit fee (£650) and depreciation of office equipment (£338) brought the total expenditure for the year to £71,664, an increase of £4,468.

During the current depressed financial climate and lower rates of interest it is difficult for the Trust's income to keep up with the annual increase in costs. Subscription rates for the *Bulletin* are adjusted annually to cover higher costs, but, unless grants and donations are to increase annually in a similar proportion, it is difficult to see how the Trust's work can continue at its present level. The size of the deficit for 1991 and the prospect for 1992 have been a cause for immediate concern, and necessitate retrenchment.

The Commission's Secretariat was again housed in the Natural History Museum, London, whom we thank for their continuing support. The Trust wishes to express its thanks to all the donors listed at the end of this report who supported its work during the year.

M.K. HOWARTH

Secretary and Managing Director

4 June 1992

List of donations and grants received during the year 1991

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South African Foundation for Research Development £500	Zoological Societies of Japan £590
Total £23,348	

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Income

SALE OF PUBLICATIONS

Bulletin of Zoological Nomenclature	£25,482
International Code of Zoological Nomenclature	2,168
Official Lists and Indexes	<u>932</u>

28,582

GRANTS, DONATIONS AND COVENANTS	23,546
BANK AND INVESTMENT INTEREST	<u>11,424</u>

34,970

63,552

Expenditure

SALARIES AND NATIONAL INSURANCE	57,791
OFFICE EXPENSES	3,463
AUDIT FEE	650
PRINTING AND DISTRIBUTION OF PUBLICATIONS	<u>9,422</u>
DEPRECIATION OF OFFICE EQUIPMENT	<u>338</u>

71,664

Deficit for the year

8,112

Case 2833

Tortaxis Pilsbry, 1906 and *Allopeas* Baker, 1935 (Mollusca, Gastropoda): proposed conservation by the designation of a neotype for *Achatina erecta* Benson, 1842

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Abstract. The purpose of this application is to conserve the usage of the subulinid land snail generic names *Tortaxis* Pilsbry, 1906 and *Allopeas* Baker, 1935, and that of the specific name of *Achatina erecta* Benson, 1842. When establishing *Tortaxis* Pilsbry designated *Achatina erecta* as the type species but he was accepting a misinterpretation of this species and in fact dealing with *Spiraxis mandarinus* Pfeiffer, 1855 (originally included as a nominal species but since synonymized with '*A. erecta*'). The syntypes of *Achatina erecta* Benson are specimens of *Bulinus gracilis* Hutton, 1834, the type species of *Allopeas*. It is proposed that usage be maintained by designating a neotype for *A. erecta* in the established sense.

1. The subulinid land snail *Achatina erecta* Benson, 1842 (p. 487) was briefly described, without figures, from a collection made by T. Cantor in coastal areas of south-east China. Four specimens from the type series are held in the collections of the Zoological Survey of India, Calcutta (registration number M2262 4/4).

2. Reeve (1849, pl. 16, fig. 69) redescribed and figured '*Achatina erecta*' based on five rather bleached shells in the H. Cuming collection, collected by Largilliert from Nanking (Nan-ching), now in the collections of the Natural History Museum, London (registration number 1991104). *A. erecta* Benson has been accepted by all subsequent workers in the sense of Reeve (for example Pilsbry, 1906, pp. 7–8, pl. 2, figs. 24–26; Yen, 1939, p. 110, pl. 11, fig. 2; Brandt, 1980, p. 107).

3. *Tortaxis* Pilsbry, 1906 (p. 5) was established with the original designation of *A. erecta* Benson, 1842 as the type species. Pilsbry mentioned Reeve (1849) when citing *A. erecta* but did not recognise that the species dealt with by Benson and by Reeve were different, although he noted that Benson's description was 'very incomplete'.

4. Having examined the Calcutta type series of *Achatina erecta* Benson I have identified them as large individuals of *Bulinus gracilis* Hutton, 1834 (p. 93), a widespread synanthropic species, 11 syntypes of which are in the Natural History Museum, London (registration number 1856.9.15.68). *B. gracilis* is the type species of *Allopeas* Baker, 1935 (p. 84), published as a subgenus of *Lamellaxis* Strebel & Pfeiffer, 1882 (p. 109) but which I consider should be given generic rank. The syntypes of *Achatina erecta* are in general agreement with Benson's description but differ in several respects from '*Achatina erecta*' as described and illustrated by Reeve (1849). Two very distinct species are represented; *A. erecta* sensu Reeve does not belong to *Lamellaxis* or to *Allopeas* but to *Tortaxis* as described by Pilsbry and as it has since been understood.

5. It is apparent that *Tortaxis* Pilsbry, 1906 was based upon a misidentified type species and the case is referred to the Commission under Article 70b of the Code. It also follows from para. 4 that under the provisions of the Code *Tortaxis* is a senior subjective synonym of *Allopeas* Baker, 1935, although such a synonymy does not result from Pilsbry's or any subsequent treatment of *Tortaxis*.

6. I consider *Spiraxis mandarina* (correctly *mandarinus*) Pfeiffer, 1855 (p. 9), one of the several nominal species originally placed in *Tortaxis*, to be synonymous with '*Achatina erecta*' sensu Reeve (1849) and later authors. Pfeiffer had noted that *S. mandarinus* was 'allied to *Achatina erecta*, Bens., which is also a *Spiraxis*'. Three syntypes of *S. mandarinus* are in the Natural History Museum, London (registration number 1987034, H. Cuming collection, locality 'China'); they are specimens of '*A. erecta* Benson' as used by and since Reeve (for example in references in para. 7 below). The name *mandarinus* has not been in recent use.

7. As *Tortaxis* Pilsbry and *Allopeas* Baker are well-established names it is desirable to conserve their current usage. Examples of the use of *Tortaxis* include Yen, 1939, 1942; Zilch, 1959, 1973; Brandt, 1980 and Chen & Gao, 1987. References to *Allopeas* include Pilsbry, 1943; Zilch, 1959, 1973; Marcus & Marcus, 1968; Mitra, Biswas & Rahman, 1976; Joo, Kwon & Habe, 1979; Brandt, 1980; Azuma, 1982; Hamada, 1983; Habe, 1985.

8. The type species of *Tortaxis* has always been given, correctly, as *Achatina erecta* Benson, 1842 but this name has been used in the taxonomic sense of *Spiraxis mandarinus* Pfeiffer, 1855, as mentioned in para. 6. The usages of *Tortaxis* Pilsbry, 1906, *T. erectus* (Benson, 1842) and *Allopeas* Baker, 1935 would all be conserved by the designation of one of the specimens of '*A. erecta*' seen by Reeve (1849) (see para. 2 above) as the neotype of *Achatina erecta* Benson, 1842. I propose that the specimen now labelled 1991104A (height 21.6 mm, width 6.8 mm and 7.4 whorls) be designated as the neotype of *A. erecta*.

9. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to set aside all previous fixations of type specimens for the nominal species *Achatina erecta* Benson, 1842 and to designate as neotype the specimen 1991104A in the Natural History Museum, London, mentioned in paras. 2 and 8 above;
- (2) to place on the Official List of Generic Names in Zoology the following names:
 - (a) *Tortaxis* Pilsbry, 1906 (gender: masculine), type species by original designation *Achatina erecta* Benson, 1842;
 - (b) *Allopeas* Baker, 1935 (gender: neuter), type species by original designation *Bulimus gracilis* Hutton, 1834;
- (3) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *erecta* Benson, 1842, as published in the binomen *Achatina erecta* (specific name of the type species of *Tortaxis* Pilsbry, 1906), and as defined by the neotype designated in (1) above;
 - (b) *gracilis* Hutton, 1834, as published in the binomen *Bulimus gracilis* (specific name of the type species of *Allopeas* Baker, 1935).

References

Azuma, M. 1982. *Coloured illustrations of the land snails of Japan*. 333 pp. Hoikusha, Osaka.

- Baker, H.B.** 1935. Jamaican land snails, 3. *The Nautilus*, **48**(3): 83–88.
- Benson, W.H.** 1842. Mollusca. In Cantor, T., General features of Chusan, with remarks on the flora and fauna of that island. Part 2, animals observed at Chusan. *Annals and Magazine of Natural History*, (1)**9**: 486–487.
- Brandt, A.J.** 1980. An annotated checklist of the non-marine molluscs of Hong Kong. Pp. 101–108 in Morton, B. (Ed.), *The malacofauna of Hong Kong and southern China*. 345 pp. Hong Kong University Press.
- Chen, D.-N. & Gao, J.-X.** 1987. On a new species of land snail from China (Stylommatophora: Subulinidae). *Acta Zootaxonomica Sinica*, **12**(1): 20–22.
- Habe, T.** 1985. Land molluscs of Torishima Island between Izu Ids. and Ogasawara Ids. *Chiribotan*, **16**(1): 20–21.
- Hamada, T.** 1983. The living snails of *Allopeas clavulinum kyotoense* captured by tiny ants. *Chiribotan*, **14**(3): 58.
- Hutton, T.** 1834. On the land shells of India. *Journal of the Asiatic Society of Bengal*, **3**: 81–93.
- Joo, I.Y., Kwon, O.K. & Habe, T.** 1979. The land snails in island Chejudo. *Korean Journal of Limnology*, **12**(1–2): 35–40.
- Marcus, E. & Marcus, E.** 1968. Über einige Subulinidae (Pulmonata von São Paulo). *Beiträge zur Neotropischen Fauna*, **5**: 186–208.
- Mitra, T.R., Biswas, S.K. & Rahman, R.** 1976. Observations on the feeding habits of *Allopeas gracile* (Hutton) (Gastropoda: Pulmonata: Subulinidae) in field and laboratory. *Science Reports of the Yokosuka City Museum*, **22**: 23–28.
- Pfeiffer, L.** 1855. Descriptions of nine new species of land-shells in the collection of H. Cuming Esq. *Proceedings of the Zoological Society of London*, **23**: 7–9.
- Pilsbry, H.A.** 1906. Achatinidae: Stenogyridae and Coeliacinae. In Tryon, G.W., Jr, *Manual of Conchology*, ser. 2, vol. 18 (Pulmonata). 357 pp., 51 pls. Academy of Natural Sciences, Philadelphia.
- Pilsbry, H.A.** 1943. *Land Mollusca of North America (north of Mexico)*, vol. 2. 53, 1113 pp. Academy of Natural Sciences of Philadelphia Monographs, No. 3, Philadelphia.
- Reeve, L.A.** 1849. Monograph of the genus *Achatina*. 23 plates and text in: *Conchologia Iconica: or, illustrations of the shells of molluscous animals*, vol. 5. Reeve, Benham & Reeve, London.
- Strebel, H. & Pfeffer, G.** 1882. Familie Stenogyridae. Pp. 96–125 in Strebel, H., *Beitrag zur Kenntniss der Fauna mexikanischer Land- und Süsswasser-Conchylien*, vol. 5. 144 pp., 19 pls. Herbst, Hamburg.
- Yen, T.-C.** 1939. Die chinesischen Land- und Süsswasser-Gastropoden des Natur-Museums Senckenberg. *Abhandlungen der Senckenbergischen Naturforschenden Gesellschaft*, **444**: 1–233.
- Yen, T.-C.** 1942. A review of Chinese gastropods in the British Museum. *Proceedings of the Malacological Society of London*, **24**: 170–289.
- Zilch, A.** 1959. Euthyneura, Gastropoda. In Wenz, W., *Handbuch der Paläozoologie*, vol. 6, Teil 2, Lieferung 2. 200 pp. Borntraeger, Berlin.
- Zilch, A.** 1973. Die Typen und Typoide des Natur-Museums Senckenberg. 51: Mollusca: Achatinacea (2): Ferrussaciidae, Subulinidae. *Archiv für Molluskenkunde*, **103**(1–3): 99–152.

Case 2845***Taningia danae* Joubin, 1931 (Mollusca, Cephalopoda): proposed precedence over *Taningia persica* (Naef, 1923)**

Michael Vecchione

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Abstract. The purpose of this application is to conserve the usage of the specific name of *Taningia danae* Joubin, 1931, a cosmopolitan large deep-sea squid which is a major food of sperm whales. A small paralarval specimen originally named as *Octopodoteuthis persica* Naef, 1923 certainly belongs to *Taningia* and probably to the only recognized species, *T. danae*; the name *persica* never has been used as valid.

1. The deep-sea squid *Taningia danae* was described by Joubin (1931, p. 181) based on a single small specimen (68 mm total length, about 40 mm mantle length) from the tropical eastern Atlantic. The species is almost cosmopolitan, and the total length may be over 2 m; most large specimens have been recovered from the stomachs of sperm whales (Roper & Vecchione, in press). While Joubin recognized the new species as belonging to the 'Octopodoteuthidae' (correctly OCTOPOTEUTHIDIDAE, but usually spelled OCTOPOTEUTHIDAE), he felt that the pair of large photophores on the tips of arms II were so distinctive as to warrant the erection of the new genus *Taningia*. The description and illustrations are quite detailed and comprehensive, and the holotype is deposited in the Zoologisk Museum, Copenhagen, where it has been examined by one of us (C.F.E.R.).

2. Some specimens reported as *Cucoteuthis unguiculata* (Molina, 1782) are most probably *Taningia danae*. Molina (p. 199) described his *Sepia unguiculata* from a 'cuttlefish' taken off Chile in 1769 on Cook's first voyage, and based it on Cook's description and a preserved arm. This nominal species was made the type of a genus *Cucoteuthis* (later emended to *Cucoteuthis*) by Steenstrup (1882, p. 153). All descriptions and illustrations of *C. unguiculata* lack any clear indication of the photophores at the arm tips which are characteristic of *T. danae*, and some reports may easily relate to large specimens of *Octopoteuthis* species. Specific and even generic identification of '*Cucoteuthis unguiculata*' cannot be made, and its names (which have not been used for many years) are best left as nomina dubia.

3. A nomenclatural problem exists from a name applied to a paralarval specimen. Chun (1910, p. 144) described a paralarva of 4.7 mm mantle length from the Gulf of Aden as the larva of an *Octopodoteuthis* (= *Octopoteuthis* Rüppell, 1844) species. He

stated that the arms bore only suckers and that especially noteworthy were the knoblike swellings at the tips of arms II. His figures (pl. 17, figs. 1, 2 and 10) clearly show these swellings, which are undoubtedly precursors of the photophores characteristic of *Taningia*.

4. Naef (1923, p. 337) recognized this as a species distinct from the known *Octopodoteuthis*, and erected the name *O. persica* based on Chun's description and figures. No additional specimens have been assigned to *O. persica* and we have been able to find only four mentions of the name. Clarke (1966, p. 187) noted that *O. persica* was based on a larval form and speculated that it might prove synonymous with *O. sicula*. Young (1972, p. 41) stated: 'The specimen shows distinct swellings near the tips of arms II and extremely broad fins. Both features are strongly suggestive of the genus *Taningia*, and I think it safe to transfer this species from *Octopoteuthis* to *Taningia*'. In effect Young proposed the new combination *Taningia persica* (Naef, 1923) but he was misquoted by Clarke (1980, p. 162) and Stephen (1985, p. 110). Clarke stated that 'Young may be correct in considering that *O. persica* is probably a young *Taningia danae*', while Stephen said that Young 'considered *Octopoteuthis persica* and *O. indica* to be nomina dubia because their small size precluded accurate identification. He also believed that *O. persica* was really the young of *Taningia danae*...'

5. An extensive review of specimens and literature (Roper & Vecchione, in press) leads us to conclude that *Taningia* should remain monospecific. Because *O. persica* clearly belongs to *Taningia*, the name *persica* Naef, 1923 has priority over *danae* Joubin, 1931. However, *persica* never has been used as valid, whereas *danae* is widely and continuously used (e.g. Clarke, 1967, 1980, 1983; Zeidler, 1981; Roper, Sweeney & Clarke, 1985; Nesis, 1987; Okutani & Tsukada, 1988; Fiscus, Rice & Wolman, 1989). The Commission Secretariat has a list of 29 further references). Consequently, we feel that *danae* should have precedence over *persica*; because *T. persica* is based on a single paralarval specimen the possibility remains that it represents a distinct species, and if this is verified in the future the name could then be used.

6. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to rule that the name *danae* Joubin, 1931, as published in the binomen *Taningia danae*, is to be given precedence over the name *persica* Naef, 1923, as published in the binomen *Octopodoteuthis persica*, whenever the two names are considered to be synonyms;
- (2) to place on the Official List of Generic Names in Zoology the name *Taningia* Joubin, 1931 (gender: feminine), type species by monotypy *Taningia danae* Joubin, 1931;
- (3) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *danae* Joubin, 1931, as published in the binomen *Taningia danae* (specific name of the type species of *Taningia* Joubin, 1931), with the endorsement that it is to be given precedence over the name *persica* Naef, 1923, as published in the binomen *Octopodoteuthis persica*, whenever the two names are considered to be synonyms;
 - (b) *persica* Naef, 1923, as published in the binomen *Octopodoteuthis persica*, with the endorsement that it is not to be given priority over the name *danae* Joubin, 1931, as published in the binomen *Taningia danae*, whenever the two names are considered to be synonyms.

References

- Chun, C. 1910. Die Cephalopoden. 1. Teil: Oegopsida. *Wissenschaftliche Ergebnisse der Deutschen Tiefsee-Expedition auf der Dampfer 'Valdivia' 1898-1899*. 402 pp. (text), 66 pls. (atlas). Fischer, Jena.
- Clarke, M.R. 1966. A review of the systematics and ecology of oceanic squids. *Advances in Marine Biology*, **4**: 91-300.
- Clarke, M.R. 1967. A deep-sea squid, *Taningia danae* Joubin, 1931. *Symposia of the Zoological Society of London*, **19**: 127-143.
- Clarke, M.R. 1980. Cephalopods in the diet of sperm whales of the southern hemisphere and their bearing on sperm whale biology. *Discovery Report*, **37**: 1-324.
- Clarke, M.R. 1983. Cephalopod biomass — estimation from predation. *Memoirs of the National Museum of Victoria*, **44**: 95-107.
- Fiscus, C.H., Rice, D.W. & Wolman, A.A. 1989. Cephalopods from the stomachs of sperm whales taken off California. *NOAA Technical Report NMFS*, **83**: 1-12.
- Joubin, L. 1931. Notes préliminaires sur les céphalopodes de croisières du Dana (1921-1922). 3e Partie. *Annales de l'Institut Océanographique*, **10**: 169-211.
- Molina, G.I. 1782. *Saggio sulla storia naturale del Chili*. 367 pp. Tommaso d'Aquino, Bologna.
- Naef, A. 1923. Die Cephalopoden. *Fauna e Flora del Golfo di Napoli*, **35**(1,1): 149-863.
- Nesis, K.N. 1987. *Cephalopods of the world; squids, cuttlefishes, and allies*. 351 pp. T.F.H. Publications, Neptune, New Jersey. [English translation.]
- Okutani, T. & Tsukada, S. 1988. Squids eaten by lancetfish and tunas in the tropical Indo-Pacific Oceans. *Journal of the Tokyo University School of Fisheries*, **75**: 1-44.
- Roper, C.F.E., Sweeney, M.J. & Clarke, M.R. 1985. Cephalopoda. Pp. 117-205 in Fischer, W. & Hureau, J.C. (Eds.), *FAO species identification sheets for fishery purposes. Southern Ocean (Fishing Areas 48, 58, and 88) (CCAMLR Convention area)*. 232 pp. Commission for the Conservation of Antarctic Living Resources, FAO, Rome.
- Roper, C.F.E. & Vecchione, M. (In press). A geographic and taxonomic review of *Taningia danae* Joubin, 1931 (Cephalopoda: Octopoteuthidae), with new records and observations on bioluminescence. *Bulletin of the Tokai Regional Fisheries Research Laboratory*.
- Steenstrup, J. 1882. Notae Teuthologicae. *Oversigt over det Kongelige Danske Videnskabernes Selskabs Forhandlinger*, **1882**: 143-168.
- Stephen, S. 1985. *The systematics of the pelagic squid genus Octopoteuthis Rüppell, 1844 (Cephalopoda; Teuthoidea) with emphasis on species in the North Atlantic*. 205 pp. Unpublished M.S. Thesis, Memorial University of Newfoundland, St John's.
- Young, R.E. 1972. The systematics and areal distribution of pelagic cephalopods from the seas off southern California. *Smithsonian Contributions to Zoology*, **97**: 1-159.
- Zeidler, W. 1981. A giant deep-sea squid, *Taningia* sp., from South Australian waters. *Transactions of the Royal Society of South Australia*, **105**: 218.

Case 2787

***Styloptocuma* Băcescu & Muradian, 1974 (Crustacea, Cumacea): proposed conservation with designation of *S. antipai* Băcescu & Muradian, 1974 as the type species**

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Abstract. The purpose of this application is to conserve the name of the cumacean genus *Styloptocuma* Băcescu & Muradian, 1974 by deeming that the type species was originally designated as *Styloptocuma antipai* Băcescu & Muradian, 1974. The name *Styloptocuma* was not made available in 1974 since Băcescu & Muradian omitted to designate a type species. Availability at present dates from publication of the name in *Zoological Record* (1979) with citation of a type species.

1. Băcescu & Muradian (1974, p. 74) described a new genus of Cumacea which they named *Styloptocuma*, with three included species none of which was stated to be the type species. One species was new and the other two were *Cumella gracillima* Calman, 1905 and *Cumella egregia* Hansen, 1920. The name of the new species was given as '*Styloptocuma antipai* n.g.n.sp.' on pp. 71 and 76 and in the explanation of pl. 1. Under Article 68b(i) of the Code the formula 'n.g.n.sp.' does not constitute a type species designation for a genus established after 1930. To be available a genus-group name published after 1930 must 'be accompanied by the fixation of a type species... by original designation or by indication' (Article 13b). It follows that *Styloptocuma* Băcescu & Muradian, 1974 is not an available name.

2. *Styloptocuma* was first made available in 1979 in *Zoological Record* (vol. 111, section 10, p. 182) in the systematic index dealing with the Cumacea, where the type species of *Styloptocuma* was cited as *S. antipai* with reference to the paper by Băcescu & Muradian (1974). Authorship of this section of *Zoological Record* (and hence of the genus *Styloptocuma*) is attributed to H. Gwynne Vevers and 39 other staff of *Zoological Record* who are all named on p. iii of the publication.

3. In *Crustaceorum Catalogus* (Băcescu, 1992) 11 species are assigned to *Styloptocuma*, which is invariably attributed to Băcescu & Muradian (1974). The 1974 description is clear, the authors give a key to the three species known to them at that time, and the new species *Styloptocuma antipai* is extensively figured and described. To attribute authorship of *Styloptocuma* to Vevers and 39 others would be contrary to usage over the 18 years since Băcescu & Muradian's paper, would not be generally acceptable to cumacean workers and would indeed be absurd.

4. The International Commission on Zoological Nomenclature is accordingly asked:
(1) to use its plenary powers to rule that the type species of *Styloptocuma* Băcescu & Muradian, 1974 is deemed to be *Styloptocuma antipai* Băcescu & Muradian, 1974 by original designation;

- (2) to place on the Official List of Generic Names in Zoology the name *Styloptocuma* Băcescu & Muradian, 1974 (gender: neuter), type species by original designation *Styloptocuma antipai* Băcescu & Muradian, 1974 as ruled in (1) above;
- (3) to place on the Official List of Specific Names in Zoology the name *antipai* Băcescu & Muradian, 1974, as published in the binomen *Styloptocuma antipai* Băcescu & Muradian, 1974 (specific name of the type species of *Styloptocuma* Băcescu & Muradian, 1974).

References

- Băcescu, M. 1992. Cumacea II. *Crustaceorum Catalogus*, **8**: 175–468.
- Băcescu, M. & Muradian, Z. 1974. *Campylaspenis*, *Styloptocuma*, *Atlantocuma*, new genera of Cumacea from the deep waters of the Atlantic. *Revue Roumaine de Biologie*, **19**: 71–78.
- Vevers, H.G. and 39 others. 1979. Crustacea. *Zoological Record*, (for 1974), **111**(10): i–xxii, 1–241.

Case 2825

Pachyrhynchus Germar, 1824, *Somatodes* Schönherr, 1840 and the specific name of *Pachyrhynchus moniliferus* Germar, 1824 (Insecta, Coleoptera): proposed conservation

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Abstract. The purpose of this application is to conserve the names *Pachyrhynchus* Germar, 1824 and *Somatodes* Schönherr, 1840 for two genera of weevils (CURCULIONIDAE) occurring in southeast Asia and South Africa respectively. Both names are threatened by the long-overlooked name *Somatodes* Schönherr, 1823 which is a senior subjective synonym of *Pachyrhynchus* and a senior homonym of *Somatodes* Schönherr, 1840. The conservation is also proposed of *P. moniliferus* Germar, 1824, the type species of *Pachyrhynchus*.

1. Schönherr's (1823) synoptic table of weevils includes (col. 1139) a family-group *Somatodides*, comprising two 'cohorts'. The nominate cohort contains a single genus and species, *Somatodes sanctus*, and is defined with the words 'Thorax pone oculos non lobatus'. Under Article 12b of the Code the generic and specific names are both available, as also is the family-group name *Somatodides*.

2. In 1826 (pp. 9, 91) Schönherr adopted the name *Pachyrhynchus* Germar, 1824 (p. 336) in place of his 1823 *Somatodes* and (p. 88) introduced the family-group name *Pachyrhynchides* in place of *Somatodides*. In 1833 (p. 513) he listed *S. sanctus* as a synonym of *P. moniliferus* Germar, 1824 (p. 336), the only species originally included in *Pachyrhynchus*, and adopted *P. moniliferus*.

3. In 1840 Schönherr (p. 800) re-introduced the name *Somatodes*, with a single species *Somatodes misumenus* Gyllenhal in Schönherr, 1840 (p. 801), for a quite different group of weevils. This generic name and the family-group name based upon it, *SOMATODINAE* Lacordaire, 1863 (p. 319), have remained in use ever since (e.g. Péringuey, 1885 (p. 141), 1908 (p. 321); Hesse, 1928 (p. 132). *Coleopterorum Catalogus* (Schenkling & Marshall, 1931) lists four genera and 10 species in the *SOMATODINAE*).

4. *Somatodes* Schönherr, 1823 has never been used since Schönherr's adoption in 1826 of *Pachyrhynchus*. However, it is still an available name and threatens both *Pachyrhynchus* Germar, 1824 (of which it is a senior subjective synonym) and *Somatodes* Schönherr, 1840 (of which it is a senior homonym). In consequence, *SOMATODINI* Schönherr, 1823 is a senior subjective synonym of *PACHYRHYNCHINI* Schönherr, 1826 (p. 88). The *SOMATODINAE* Lacordaire, 1863 are a small and obscure group of South African weevils, whereas the *PACHYRHYNCHINI* are an important south-east Asian group which includes the well-known 'Easter egg weevils' of the Philippines and some important pests of cacao in Papua New Guinea. The names *PACHYRHYNCHINI* Schönherr, 1826 and *Pachyrhynchus* Germar, 1824 were conserved by the suppression of the bird name *Pachyrhynchus* Wagler, 1822 and, together with *P. moniliferus*

Germar, 1824, placed on relevant Official Lists in Opinion 928 (August 1970). However, if a name placed on an Official List is a synonym of another available name the principle of priority applies unless the Commission rules otherwise (Article 78f(iv)).

5. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to suppress the following names:

(a) the generic name *Somatodes* Schönherr, 1823, and all uses of *Somatodes* prior to the publication of *Somatodes* Schönherr, 1840, for the purposes of both the Principle of Priority and the Principle of Homonymy;

(b) the specific name *sanctus* Schönherr, 1823, as published in the binomen *Somatodes sanctus*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;

(2) to place on the Official List of Generic Names in Zoology the name *Somatodes* Schönherr, 1840 (gender: masculine), type species by monotypy *Somatodes misumenus* Gyllenhal in Schönherr, 1840;

(3) to place on the Official List of Specific Names in Zoology the name *misumenus* Gyllenhal in Schönherr, 1840, as published in the binomen *Somatodes misumenus* (specific name of the type species of *Somatodes* Schönherr, 1840);

(4) to place on the Official List of Family-Group Names in Zoology the name SOMATODINAE Lacordaire, 1863 (type genus *Somatodes* Schönherr, 1840);

(5) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Somatodes* Schönherr, 1823, as suppressed in (1)(a) above;

(6) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *sanctus* Schönherr, 1823, as published in the binomen *Somatodes sanctus* and as suppressed in (1)(b) above;

(7) to place on the Official Index of Rejected and Invalid Family-Group Names in Zoology the name SOMATODINI Schönherr, 1823 (type genus *Somatodes* Schönherr, 1823) (unavailable because the name of its type genus has been suppressed).

Acknowledgement

I wish to thank Dr M.A. Alonso-Zarazaga of the Museo Nacional de Ciencias Naturales, Madrid, Spain, for drawing this matter to my attention.

References

- Germar, E.F. 1824. *Insectorum species novae aut minus cognitae, descriptionibus illustratae*. Vol. 1. xxiv, 624 pp. Hendel, Halae.
- Hesse, A.J. 1928. Some new species of Curculionidae from South Africa and South-West Africa. *Transactions of the Royal Society of South Africa*, **16**: 131–167.
- Lacordaire, T. 1863. *Histoire naturelle des insectes. Genera des coléoptères*. 6. Curculionides. 637 pp. Roret, Paris.
- Péringuey, L. 1885. First contribution to the South-African coleopterous fauna. *Transactions of the South-African Philosophical Society*, **3**: 74–150.
- Péringuey, L. 1908. Description of new species of Coleoptera in the collection of the South African Museum. *Annals of the South African Museum*, **5**: 271–344.
- Schenkling, S. & Marshall, G.A.K. 1931. Curculionidae: Dinomorphinae, Somatodinae, Amycterinae, Gonipterinae. *Coleopterorum Catalogus*, **116** (sections separately pagged).
- Schönherr, C.J. 1823. Curculionides. *Isis* (von Oken), **7**(10): 1132–1152 (cols.).
- Schönherr, C.J. 1826. *Curculionidum dispositio methodica*. Vol. 1. x, 338 pp. Fleischer, Lipsiae.
- Schönherr, C.J. 1833. *Genera et species curculionidum*. Vol. 1. xii, 681 pp. Roret, Parisiis.
- Schönherr, C.J. 1840. *Genera et species curculionidum*. Vol. 5, part 2. Pp. 465–970. Roret, Parisiis.

Case 2808***Cliola (Hybopsis) topeka* Gilbert, 1884 (currently *Notropis topeka*; Osteichthyes, Cypriniformes): proposed conservation of the specific name**

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Abstract. The purpose of this application is to conserve the specific name of *Notropis topeka* (Gilbert, 1884) which is in universal usage for the Topeka shiner, a freshwater fish of north-central North America (family CYPRINIDAE). It is threatened by the unused senior subjective synonym *Moniana tristis* Girard, 1857.

1. Girard (1857) described many new species of CYPRINIDAE and CATOSTOMIDAE, mostly collected by naturalists and medical personnel attached to the early western railway and boundary surveys. His descriptions were often inadequate and the type series composite and, unfortunately, much of the type material has subsequently been lost (see Gilbert, 1978, pp. 5-6). More complete descriptions and illustrations for most species published in two subsequent papers (Girard, 1858, 1859), together with the work of Jordan (1885) and others, has allowed the status of most nominal species to be ascertained. However, the identity of a few species has remained problematic.

2. The name *Moniana tristis* Girard, 1857 (p. 201) has been rarely, if ever, used and has been unassignable to any taxon for a number of reasons: the original description was vague enough to be applicable to more than one species and there was no illustration; the type material has not been relocated (two of the five syntypes, listed by Girard, 1858, p. 278 and originally in the U.S. National Museum, Washington, have recently been found but three are still missing); the type locality is uncertain and the collection date questionable. Neither of Girard's descriptive accounts of this species (1857, 1858) indicated a locality of capture; Girard (1858, p. 278) cited a 'Mr Kreuzfeldt' as having collected the syntypes in '1854', in apparent reference to Dr Creutzfeldt (a botanist associated with the Gunnison expedition that passed through parts of Colorado, Kansas, New Mexico and Utah in 1853) who however died in October 1853 (see Mayden, 1987, p. 791). The taxon was recorded by Gilbert (1978, p. 84) as 'not definitely identifiable'.

3. Dr C.L. Hubbs examined a single specimen (catalogue no. 1793) in the type collection at the Museum of Comparative Zoology, Harvard, and identified it as *Moniana tristis* Girard, 1857. Mayden (1987, pp. 790-791) considered the specimen to be one of Girard's original syntypes and identifiable as a juvenile of *Notropis umbratilis* (Girard, 1857) (p. 193). Since the specimen appeared to be the only surviving syntype and since the names *tristis* and *umbratilis* were published in the same work, Mayden recommended that *Moniana tristis* 'be considered a junior synonym, in part, of *Notropis umbratilis*'. He also concluded that 'it is probable that the original five specimens in the syntypic collection represented more than one species'.

4. Dr C.R. Gilbert subsequently discovered a second syntype of *Moniana tristis* amongst the type material of North American fishes in the Muséum National d'Histoire Naturelle in Paris (see Mayden & Gilbert, 1989, p. 1087, fig. 1). The specimen (catalogue no. MNHN-427) is compatible with Girard's description but is unquestionably assignable to the species currently known as *Notropis topeka* (C.H. Gilbert, 1884). Mayden & Gilbert designated this second specimen as the lectotype of *M. tristis* Girard and placed *topeka* in the synonymy of *tristis* on the grounds that Girard's (1858) redescription better fits *topeka* than *umbratilis*. They adopted the senior name (i.e. *tristis* Girard, 1857). We believe this action created nomenclatural instability. Placing the name *tristis* as a junior synonym of *umbratilis*, as initially proposed by Mayden (1987), would have disposed of *tristis* whilst maintaining the stability of *topeka*. We also believe that the locality data and date of collection given by Mayden (1987, pp. 790–791) and Mayden & Gilbert (1989, p. 1088) are speculative (see para. 2 above).

5. The name *Cliola (Hybopsis) topeka* Gilbert, 1884 (p. 13) was based on three specimens from Shunganunga Creek, a tributary of the Kansas River. One specimen (catalogue no. 36609 in the U.S. National Museum) was subsequently (C.H. Gilbert, 1885, p. 513) mentioned as the 'type specimen'. This is not unambiguously a lectotype designation and may simply refer to its being a syntype, as accepted by C.R. Gilbert (1978, pp. 9, 84). The latter recorded further original material in the National Museum and in the Museum of Comparative Zoology, Harvard. The name, as *Notropis topeka* (Gilbert, 1884), has been used consistently during this century for the fish called the Topeka shiner from north-central North America. The name has appeared in all major checklists (Robins et al., 1980, p. 25 and earlier editions; Lee et al., 1980, p. 317) and in all the current field guides for the states in which it occurs: Iowa (Bailey, 1956, p. 333); Kansas (Cross, 1967, p. 128; Cross & Collins, 1957, p. 71); Minnesota (Phillips, Schmid & Underhill, 1982, p. 140); Missouri (Pfleger, 1971, p. 360; 1975, p. 161, fig. 55b (p. 121)); Nebraska (Morris, Morris & Witt, 1972, p. 89); South Dakota (Bailey & Allum, 1962, p. 68; Owen, Elsen & Russell, 1981, p. 159). The latest edition of the checklist by Robins et al. (1991, p. 23) retains the name *Notropis topeka*, with a comment (p. 77) referring to Mayden & Gilbert (1989) and the present application (justifying retention of *topeka* under Article 80 of the Code). To maintain stability in the usage of *topeka* we propose that the doubtful name *tristis* Girard, 1857, unused until 1989, be suppressed.

6. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to suppress the name *tristis* Girard, 1857, as published in the binomen *Moniana tristis*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) to place on the Official List of Specific Names in Zoology the name *topeka* Gilbert, 1884, as published in the binomen *Cliola (Hybopsis) topeka*;
- (3) to place on the Official Index of Rejected and Invalid Names in Zoology the name *tristis* Girard, 1857, as published in the binomen *Moniana tristis* and as suppressed in (1) above.

References

- Bailey, R.M. 1956. A revised list of the fishes of Iowa with keys for identification. Pp. 325–377 in Harlan, J.R. & Speaker, E.B., *Iowa fish and fishing*, Ed. 3. Iowa State Conservation Commission, Des Moines.

- Bailey, R.M. & Allum, M.O. 1962. Fishes of South Dakota. *University of Michigan Museum of Zoology. Miscellaneous Publications*, **119**: 1–131.
- Cross, F.B. 1967. Handbook of fishes of Kansas. *University of Kansas. Museum of Natural History Miscellaneous Publications*, **45**: 1–357.
- Cross, F.B. & Collins, J.T. 1975. *Fishes in Kansas*. 189 pp. University of Kansas. Museum of Natural History Public Education Series No. 3.
- Gilbert, C.H. 1884. Notes on the fishes of Kansas. *Bulletin of the Washburn College Laboratory of Natural History*, **1**(1): 10–16.
- Gilbert, C.H. 1885. Description of three new fishes from Kansas. *Proceedings of the United States National Museum*, **7**(33): 512–514.
- Gilbert, C.R. 1978. Type catalogue of the North American cyprinid fish genus *Notropis*. *Bulletin of the Florida State Museum. Biological Sciences*, **23**(1): 1–104.
- Girard, C. 1857. Researches upon the cyprinoid fishes inhabiting the fresh waters of the United States of America, west of the Mississippi Valley, from specimens in the museum of the Smithsonian Institution. *Proceedings of the Academy of Natural Sciences of Philadelphia*, **8**(5): 165–213.
- Girard, C. 1858. Fishes. General report on the zoology of the several Pacific railroad routes. *United States Pacific Railroad Survey*, **10**(4): 1–400.
- Girard, C. 1859. Ichthyology of the boundary. *United States and Mexican Boundary Survey*, **2**(2): 1–85.
- Jordan, D.S. 1885. Identification of the species of Cyprinidae and Catostomidae, described by Dr Charles Girard, in the Proceedings of the Academy of Natural Sciences of Philadelphia for 1856. *Proceedings of the United States National Museum*, **8**(500): 118–127.
- Lee, D.S., Gilbert, C.R., Hocutt, C.H., Jenkins, R.E., McAllister, D.E. & Stauffer, J.R., Jr. 1980. *Atlas of North American freshwater fishes*. 867 pp. North Carolina State Museum of Natural History, Raleigh.
- Mayden, R.L. 1987. Identification of *Moniana tristis* Girard (Cypriniformes: Cyprinidae). *Copeia*, **1987**(3): 790–792.
- Mayden, R.L. & Gilbert, C.R. 1989. *Notropis ludibundus* (Girard) and *Notropis tristis* (Girard), replacement names for *N. stramineus* (Cope) and *N. topeka* (Gilbert) (Teleostei: Cypriniformes). *Copeia*, **1989**(4): 1084–1089.
- Morris, J., Morris, L. & Witt, L. 1972. *The fishes of Nebraska*. 98 pp. Nebraska Game and Parks Commission, Lincoln.
- Owen, J.B., Elsen, D.S. & Russell, G.W. 1981. *Distribution of fishes in North and South Dakota basins affected by the Garrison Diversion Unit*. 211 pp. University of North Dakota, Grand Forks.
- Pflieger, W.L. 1971. A distributional study of Missouri fishes. *University of Kansas Publications. Museum of Natural History*, **20**(3): 225–570.
- Pflieger, W.L. 1975. *The fishes of Missouri*. viii, 343 pp. Missouri Department of Conservation, Jefferson City.
- Phillips, G.L., Schmid, W.D. & Underhill, J.C. 1982. *Fishes of the Minnesota region*. 248 pp. University of Minnesota, Minneapolis.
- Robins, C.R., Bailey, R.M., Bond, C.E., Brooker, J.R., Lachner, E.A., Lea, R.N. & Scott, W.B. 1980. *A list of common and scientific names of fishes from the United States and Canada*, Ed. 4. *American Fisheries Society. Special Publication*, **12**: 1–174.
- Robins, C.R., Bailey, R.M., Bond, C.E., Brooker, J.R., Lachner, E.A., Lea, R.N. & Scott, W.B. 1991. *Common and scientific names of fishes from the United States and Canada*, Ed. 5. *American Fisheries Society. Special Publication*, **20**: 1–183.

Case 2834***Mugil curema* and *M. liza* Valenciennes in Cuvier & Valenciennes, 1836 (Osteichthyes, Perciformes): proposed conservation of the specific names**

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Abstract. The purpose of this application is to conserve the specific names of *Mugil curema* and *M. liza*, both of Valenciennes in Cuvier & Valenciennes (1836) (family MUGILIDAE). The name *curema* is threatened by two senior subjective synonyms, *M. brasiliensis* Spix in Spix & Agassiz, 1831 and *M. gaimardianus* Desmarest, 1831, but it is in use for the Atlantic white mullet, a species which is widely distributed in the Gulf of Mexico, the Caribbean and the Atlantic coast of North and South America, and the coast of West Africa. The name *liza* refers to the liza mullet which occurs along coasts from Bermuda and the southern tip of Florida to Natal, Brazil; this name is threatened by *brasiliensis*. Both species are of considerable economic importance.

1. The identity of the nominal species *Mugil brasiliensis* Spix in Spix & Agassiz, 1831 (p. 134, pl. 72) has remained problematic. The species was described with 'Pinna dorsali posteriore, caudali et anali squamulis minutissimis obtectis', and the anal fin was stated to have 14 rays. Agassiz listed his material as two spirit specimens and a larger, dried specimen in the Zoologische Staatssammlung, Munich. Jordan & Swain (1884, p. 269) quoted a report by Dr Spaugenberg, then curator of the museum, that a dried fish in the collections was the basis of Spix's figure; they identified it as a specimen of *Mugil trichodon* Poey, 1875 (p. 66, pl. 8, figs. 4-8), a species with densely scaled soft dorsal and anal fins and eight anal fin rays. The spirit specimens were thought to represent two further, distinct species. Jordan (1887, p. 571) listed *brasiliensis* with *Mugil liza* Valenciennes, 1836 (p. 83) cited as a synonym. Subsequently, Jordan & Evermann (1896, p. 810) placed *brasiliensis* in the section of their key to species distinguished by 'soft dorsal and anal fins almost naked' and eight anal fin rays (or rarely seven), with *M. liza* as one of its synonyms. This usage was adopted by Schultz (1949, p. 114) and others (see Thomson, 1964, p. 7). On the other hand, Günther (1861, p. 431) adopted the name for a species with scaly dorsal and anal fins and considered *M. curema* Valenciennes, 1836 (p. 87), which has nine anal fin rays, to be a synonym. This was followed by Poey (1875, p. 61) and others (see Thomson, 1964, p. 7). Since the identity of the taxon was

uncertain and the type material no longer extant (see para. 3 below), Trewavas (1950) recommended that the name *brasiliensis* should not be used; this was followed by Carvajal Rojas (1972, p. 18) who adopted the names *curema* and *liza*. Thomson (1964, p. 6) listed *brasiliensis* as a species inquirenda.

2. Alvarez-Lajonchere (1975) recognised that the description (by Agassiz) and the drawing (by Spix) of *Mugil brasiliensis* in the original work present several characters in which it resembles *M. liza* and others that suggest *M. curema*; he also pointed out that there are inconsistencies between the description and drawing, and between these and the characters found in the genus *Mugil* and family MUGILIDAE. Poey (1875, p. 63) had previously noted the imperfection of the drawing. Alvarez-Lajonchere (1975) considered *brasiliensis* to be a nomen dubium and we consider that nomenclatural stability would be best served by suppressing the name.

3. Agassiz's (1831) original specimens of *Mugil brasiliensis* (see para. 1 above), formerly housed in the Munich museum, are believed to have been destroyed by bombing in 1944. Four alcohol-preserved specimens reputedly from Spix's collection were rediscovered in the Neuchâtel Museum, Switzerland, by Dr M. Kottelat, who listed (Kottelat, 1988, p. 84) two of them as putative syntypes. The four specimens have now been examined by one of us (G.J.H.) and colleagues Drs I.J. Harrison and C. Dufour, who found that three specimens represent a *Liza* species and one *Mugil* cf. *hospes*. The fact that the genus *Liza* Jordan & Swain, 1884 does not occur in American waters casts considerable doubt on their being Spix's specimens. Kottelat noted that Agassiz arranged exchanges of material with other workers and it is possible that these specimens, which have no documentation, derive from some other source.

4. The name *Mugil gaimardianus* Desmarest, 1831 (pl. 109) was based on an illustration of a specimen from Cuba. The plate has long been recognised as inadequate, Valenciennes (1836, p. 88) noting simply that the colour was too brown and too uniform. Poey (1875, p. 64, pl. 8, figs. 1-3) provided the first description of a taxon under this name and this has been cited, together with Desmarest's drawing, in subsequent references to the species. However, Poey's description of a Cuban mullet with a narrower lip than his '*M. brasiliensis*' and other features suggest that he may have been referring to *M. incilis* Hancock, 1830 (see Alvarez-Lajonchere, 1976). Poey (1866, p. 332) considered under one species the names *brasiliensis*, *curema* and *gaimardianus*, remarking that the last had priority; later (1875, p. 61) he tentatively included *gaimardianus* and *curema* in the synonymy of *brasiliensis*. Jordan & Evermann (1896, pp. 814-815) gave another description which clearly corresponds to *M. curema* Valenciennes, as Rivas (1949a) pointed out. For this reason Rivas (1949b) did not include *gaimardianus* among the species found in Florida waters. Mefford (1955), followed by Robins (1958), Broadhead (1958) and Bullis, Roe & Gatlin (1972, p. 44), listed *gaimardianus* as distinct from *curema*. Other authors, for example Meek & Hildebrand (1923, p. 279), have placed the name *gaimardianus* (1831) in the synonymy of *curema* (1836), inappropriately in view of the dates.

5. Alvarez-Lajonchere (1975) pointed out that from the body form of the fish Desmarest's (1831) drawing could be identified as either *M. curema* Valenciennes or *M. trichodon* Poey, 1875, but that there are inconsistencies between the figure and the characters found in these species. The numbers of pelvic and anal fin rays portrayed are not found in the genus *Mugil*, while features shown in the ventral fin do not occur in the MUGILIDAE.

6. Desmarest (1831) did not mention the existence of original material for his new species. Poey (1875) referred to a specimen classified by Desmarest at the Jardin des Plantes, Paris, but this has not been found. Although there are no specimens from Cuba among the syntypes of *M. curema* there is one labelled 'Cuba-Desmarest' (catalogue number MNHN A3613 in the Muséum National d'Histoire Naturelle, Paris) among the syntypes of *M. petrosus* Valenciennes, 1836. One of us (E.T.) has identified this specimen as *curema*. Since Desmarest mentioned no other mullet from Cuba it is possible that this is the holotype of *gaimardianus*, but this cannot be proved. Accepting it as a specimen of *curema* can do no more than support the usual synonymising of *petrosus* with *curema*. In the absence of type material the name *Mugil gaimardianus* Desmarest can only be applied to a species in which the individuals show the same characteristics as Desmarest's published drawing. We consider the name to be a nomen dubium since it is impossible to apply it with certainty to any taxon of the species group. For the sake of stability in the nomenclature we propose that the name be suppressed.

7. The name *Mugil curema* Valenciennes, 1836 was proposed for a South American species. The syntypes in the Muséum National d'Histoire Naturelle, Paris (catalogue nos. MNHN A3653, A4641, A4655 and A4671) leave no doubt as to the identity of the taxon. In describing *curema*, Valenciennes (p. 88) stated that he was certain that *brasiliensis* and *gaimardianus* referred to the same species: 'nous n'hésitons pas à lui rapporter le *mugil brasiliensis* de Spix' and 'c'est cette espèce que M. Desmarest a fait représenter dans la Dictionnaire classique d'histoire naturelle sous le nom de *mugil Gaimardianus*'. Valenciennes's (1836) syntypes of *M. liza* are in good condition in the Muséum National d'Histoire Naturelle; it is apparent that more than one species is represented but *M. liza* as currently understood is a well-recognised and documented species (see Thomson, 1964, p. 47).

8. The names *Mugil curema* and *M. liza* are in use for the white and liza mullets of South America. Both names appear in the checklist of Robins et al. (1980, p. 49), a number of identification guides (see, for example, Guitart, 1975, pp. 309, 310, 313, figs. 236, 239; Thomson, 1977; and Menezes, 1983, pp. 3–5, figs. 5, 7) and in the literature on fish farming (Oren, 1981). A list of a further 21 references demonstrating usage of the names is held by the Commission Secretariat.

9. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to suppress the following specific names for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:

- (a) *brasiliensis* Spix in Spix & Agassiz, 1831, as published in the binomen *Mugil brasiliensis*;
- (b) *gaimardianus* Desmarest, 1831, as published in the binomen *Mugil gaimardianus*;

(2) to place on the Official List of Specific Names in Zoology the following names:

- (a) *curema* Valenciennes in Cuvier & Valenciennes, 1836, as published in the binomen *Mugil curema*;
- (b) *liza* Valenciennes in Cuvier & Valenciennes, 1836, as published in the binomen *Mugil liza*;

(3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the following names:

- (a) *brasiliensis* Spix in Spix & Agassiz, 1831, as published in the binomen *Mugil brasiliensis* and as suppressed in (1)(a) above;

- (b) *gaimardianus* Desmarest, 1831, as published in the binomen *Mugil gaimardianus* and as suppressed in (1)(b) above.

References

- Alvarez-Lajonchere, L. 1975. Estudio sistematico de *Mugil brasiliensis*, *Mugil gaimardianus* y *Mugil curema*. *Investigaciones Marinas*, (8)**14**: 1–18.
- Alvarez-Lajonchere, L. 1976. Segunda adicion a la bibliografia de la familia Mugilidae (Teleostei) publicada por FAO en 1972. *Investigaciones Marinas*, (8)**23**: 1–77.
- Broadhead, G.C. 1958. Growth of the black mullet (*Mugil cephalus* L.) in west and northwest Florida. *Technical Series. Florida State Board of Conservation*, **25**: 1–29.
- Bullis, H.R., Roe, R.B. & Gatlin, J.C. 1972. The Southeast Fisheries Center bionumeric code. Part 1: fishes. *NOAA Technical Report NMFS SSRF*, **659**: 1–95.
- Carvajal Rojas, J. 1972. Contribucion al conocimiento de la biologia de las lagunas y rios de Campoma y Buena Vista (Venezuela), especialmente del robalo *Centropomus parallelus* Poey. *Cuadernos Oceanographia*, **3**: 3–36.
- Desmarest, A.G. 1831. Muge gaimardien, *Mugil gaimardianus*. Pp. 129–130, pl. 109 in Audouin, [J.V.] et al. (Eds.), *Dictionnaire classique d'histoire naturelle*, vol. 17 (Atlas et illustration des planches). vii, 141 pp., 160 pls. Rey & Gravier, Paris.
- Guitart, D.J. 1975. *Sinopsis de los peces marinos de Cuba*, vol. 2 (Class Osteichthyes). Pp. 141–323. Academia de Ciencias de Cuba. Instituto de Oceanologia, Havana.
- Günther, A. 1861. *Catalogue of the fishes in the British Museum*, vol. 3 (First order, Acanthopterygii). xxv, x, 586 pp. British Museum, London.
- Jordan, D.S. 1887. A preliminary list of the fishes of the West Indies. *Proceedings of the United States National Museum*, **9**: 554–608.
- Jordan, D.S. & Evermann, B.W. 1896. The fishes of North and middle America. Part 1. *Bulletin of the United States National Museum*, **47**: 1–1240.
- Jordan, D.S. & Swain, J. 1884. A review of the American species of marine Mugilidae. *Proceedings of the United States National Museum*, **7** (17, 18): 261–275.
- Kottelat, M. 1988. Authorship, dates of publication, status and types of Spix and Agassiz's Brazilian fishes. *Spixiana*, **11**(1): 69–93.
- Meek, S.E. & Hildebrand, S.F. 1923. The marine fishes of Panama. *Field Museum of Natural History. Zoological Series*, **15**(1): 1–330.
- Mefford, H.P. 1955. The silver mullet fishery in south Florida. *Reports of the Florida State Board of Conservation*, **55**(34): 1–55.
- Menezes, N.A. 1983. Guia pratico para conhecimento e identificacao das tainhas e paratis (Pisces, Mugilidae) do litoral brasileiro. *Revista Brasileira de Zoologia*, **2**(1): 1–12.
- Oren, O.H. (Ed.). 1981. *Aquaculture of grey mullets*. xxi, 507 pp. International Biological Programme 26. Cambridge University Press, Cambridge.
- Poey, F. 1866. Revista de los tipos Cuvierianos y Valenciennianos correspondientes a los Peces de la isla de Cuba. Pp. 308–338 in: *Repertorio fisico-natural de la Isla de Cuba*, vol. 1. Habana.
- Poey, F. 1875. Poissons de l'île de Cuba. Espèces nouvelles décrites. *Annals of the Lyceum of Natural History of New York*, **11**(3–4): 58–70.
- Rivas, L.R. 1949a. Key to the Florida and Gulf of Mexico fishes of the genus *Mugil* (mulletts). 3 pp. University of Miami (mimeographed).
- Rivas, L.R. 1949b. Check list of the Florida game and commercial marine fishes. *Educational Series. Florida Board of Conservation*, **4**: 5–39.
- Robins, C.R. 1958. Check list of the Florida game and commercial marine fishes. *Educational Series. Florida Board of Conservation*, **12**: 5–44.
- Robins, C.R., Bailey, R.M., Bond, C.E., Brooker, J.R., Lachner, E.A., Lea, R.N. & Scott, W.B. 1980. *A list of common and scientific names of fishes from the United States and Canada*, Ed. 4. American Fisheries Society. Special Publication, **12**: 1–174.
- Schultz, L.P. 1949. A further contribution to the ichthyology of Venezuela. *Proceedings of the United States National Museum*, **99**: 1–211.

- Spix, J.B. de & Agassiz, L.** 1831. *Selecta genera et species piscium quos in itinere per Brasiliam... Collegit et pingendos curavit Dr J.B. de Spix.... Digessit, descripsit et observationibus anatomicis illustravit Dr L. Agassiz*, part 2. Pp. 83–138, pls. E–G, 46–76, 50a, 50b, 56a, 56b, 69a, A–F. Wolf, Monachii.
- Thomson, J.M.** 1964. A bibliography of systematic references to the grey mullets (Mugilidae). *Technical Papers. Division of Fisheries and Oceanography. C.S.I.R.O.*, **16**: 1–127.
- Thomson, J.M.** 1977. Mugilidae. 11 sheets in Fischer, W. (Ed.), *FAO species identification sheets for fishery purposes. Western Central Atlantic (Fishing area 31)*, vol. 3 (Bony fishes, Holocentridae to Pomacanthidae). FAO, Rome.
- Trewavas, E.** 1950. The status of the American mullets *Mugil brasiliensis* and *M. curema*. *Copeia*, **1950**(2): 149.
- Valenciennes, M.A.** 1836. Des muges ou mulets. Pp. 7–155 in: Cuvier, G. & Valenciennes, M.A. (Eds.), *Histoire naturelle des poissons*, vol. 11 (famille des Mugiloides). xx, 506 pp. Levrault, Paris.

Case 2840***Coelurus bauri* Cope, 1887 (currently *Coelophysis bauri*; Reptilia, Saurischia): proposed replacement of the lectotype by a neotype**

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Abstract. The purpose of this application is to propose a neotype for the well-known Triassic dinosaur *Coelurus bauri* Cope, 1887, the type species of *Coelophysis* Cope, 1889. Hunt & Lucas (1991) have suggested that Cope's name is a nomen dubium because of the fragmentary nature of the original type material; they erected a new nominal taxon *Rioarribasaurus colberti* Hunt & Lucas, 1991. This action is unnecessary and confusing. Extraordinarily abundant remains of this dinosaur are known from the general locality and the horizon where Cope's specimens were found. It is proposed that a complete skeleton, the holotype of *R. colberti*, be designated as the neotype of *Coelurus bauri* Cope, 1887 thereby rendering *C. bauri* a senior objective synonym of *R. colberti* and providing a much more informative type specimen.

1. Cope (1887a, p. 368) named two dinosaur species, *Coelurus bauri* and *C. longicollis*, based upon fragmentary fossils collected by David Baldwin in 1881 from Upper Triassic sediments at two localities in northern New Mexico (Rio Arriba County),

namely Arroyo Seco near its confluence with the Chama River and near Cerro Blanco. No holotypes were designated and there were no illustrations. Cope subsequently (1887b, pp. 221–227) transferred the two nominal species to the genus *Tanystropheus* and added a new species, *T. willistoni*.

2. In 1889 Cope (p. 626) established the new genus *Coelophysis* for the three species he had described, but none was designated as the type species. Cope's specimens (isolated fragmentary skeletal elements with no skull bones or teeth) and species were redescribed by von Huene (1915, pp. 500–507), who provided the first illustrations. American Museum of Natural History numbers were given to 38 specimens by von Huene; several were listed as 'types' of each of the three species but this action has no validity under the Code.

3. Hay (1930, p. 186) designated *Coelophysis bauri* as the type species of the genus. Welles (1984, pp. 159–160) selected as 'lectotype' for *C. bauri* a fragmentary ilium (specimen AMNH 2708) from among the Cope fossils. This designation is however invalid: the specimen had been placed by Cope (1887b) in *Coelurus longicollis* and was assigned to *C. bauri* only by von Huene (1915).

4. In 1947 a prolific deposit of Triassic dinosaur skeletons was discovered at Ghost Ranch, New Mexico, by a party from the American Museum of Natural History (Colbert, 1947, pp. 392–399). Blocks of fossil bones were obtained composed almost entirely of dinosaur skeletons, identified by Colbert (1947) as *C. bauri*. The quarry from which they were recovered is probably within 2 km of the Arroyo Seco locality from which Baldwin had collected many of the fossils described by Cope (see para. 1) and is approximately at the same stratigraphic level (in Baldwin's words 'four hundred feet below gypsum stratum'; see also Schwartz & Gillette, in press). Additional collections from this quarry were made by several museums in 1948, 1981, 1982 and 1985, and particularly important cooperative excavations were made in 1981 and 1982 by the Carnegie Museum, the New Mexico Natural History Museum, the Museum of Northern Arizona, and the Peabody Museum of Yale University.

5. For the better part of a century the generic name *Coelophysis* has been widely used as representing an ancestral theropod dinosaur. Since 1948 this usage has been based on full knowledge of the skeleton as exemplified by the numerous complete specimens from the Ghost Ranch quarry.

6. Padian (1986, pp. 45–60) reviewed Cope's material, listing the 38 specimens figured by von Huene (see para. 2) and seven further original specimens. In an extensive review Colbert (1989) included these and about 100 subsequently excavated specimens (which represent only a fraction of those now prepared or being prepared) from six major North American museums and concluded that all the *Coelophysis* specimens are properly included in the single species *C. bauri*, of which they represent various ontogenetic stages. Colbert (p. 33), at that time unaware of the invalid selection by Welles mentioned in para. 3, designated specimen AMNH 2722, a series of four sacral vertebrae, as the lectotype of *Coelurus bauri* Cope, 1887.

7. Rowe & Gauthier (1990, pp. 152–153, 165–168) presented a study of theropods that identifies an early radiation of forms that these authors termed Ceratosauria. They explicitly, and independently of Colbert (1989), accepted *Coelophysis bauri* as the proper name for the Ghost Ranch material and used the characters in this material for their analyses. This is consistent with the historical usage of the name and illustrates the importance of this taxon to the understanding of the evolution of Theropoda.

8. Hunt & Lucas (1991, p. 191) erected a new nominal taxon, *Rioarribasaurus colberti*, for the fossils from the Ghost Ranch Quarry, claiming that *Coelophysis bauri* (Cope, 1887) is a nomen dubium. This action was based on their contention that the lectotype designated by Colbert (see para. 6) is not diagnostic; they correctly pointed out that the earlier selection by Welles was invalid. Hunt & Lucas maintained that the Ghost Ranch quarry is at a different horizon from that of the sediments from which Baldwin had collected the fossils for Cope, an argument strongly disputed by Schwartz & Gillette (in press; see also para. 4 above). The establishment of new generic and specific names is unnecessary because individual bones from Ghost Ranch are obviously identical to corresponding elements in the Cope fossils. Hunt & Lucas did not dispute the synonymy of *C. bauri* (as always understood) and *R. colberti* so their name should not be used as valid.

9. The name *Coelophysis bauri* is more than 100 years old and is solidly entrenched in the literature, both technical and popular. *C. bauri* is now known from many hundred specimens of which a large proportion consists of articulated skeletons. It has been designated as the official State Fossil of New Mexico and it is the logo of the New Mexico Museum of Natural History.

10. Although the specimen designated by Colbert (1989; see para. 6) as the lectotype of *C. bauri* is in our opinion undoubtedly conspecific with the complete articulated skeleton (AMNH 7224 in the American Museum of Natural History) which is the holotype of *Rioarribasaurus colberti*, it is desirable to make the synonymy of the two nominal species objective and to have a much more informative type specimen of *C. bauri*. None of Cope's original material is suitable for the latter purpose. We therefore propose that specimen AMNH 7224 be designated the neotype of *C. bauri*, thereby rendering *bauri* a senior objective synonym of *R. colberti*. The generic names *Coelurus* and *Rioarribasaurus* also become objective synonyms.

11. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to set aside all previous fixations of type specimens for the nominal species *Coelurus bauri* Cope, 1887;
- (2) to designate the articulated skeleton AMNH 7224 in the American Museum of Natural History as the neotype of the nominal species *Coelurus bauri* Cope, 1887;
- (3) to place on the Official List of Generic Names in Zoology the name *Coelophysis* Cope, 1889 (gender: feminine), type species by subsequent designation by Hay (1930) *Coelurus bauri* Cope, 1887;
- (4) to place on the Official List of Specific Names in Zoology the name *bauri* Cope, 1887, as published in the binomen *Coelurus bauri* and as defined by the neotype designated in (2) above (specific name of the type species of *Coelophysis* Cope, 1889);
- (5) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Rioarribasaurus* Hunt & Lucas, 1991 (a junior objective synonym of *Coelophysis* Cope, 1889);
- (6) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *colberti* Hunt & Lucas, 1991, as published in the binomen *Rioarribasaurus colberti* (a junior objective synonym of *Coelurus bauri* Cope, 1887).

References

- Colbert, E.H. 1947. The little dinosaurs of Ghost Ranch. *Natural History*, **56**: 392–399, 427–428.
- Colbert, E.H. 1989. The Triassic dinosaur *Coelophysis*. *Museum of Northern Arizona Bulletin*, **57**: 1–160.
- Cope, E.D. 1887a. The dinosaurian genus *Coelurus*. *American Naturalist*, **21**: 367–369.
- Cope, E.D. 1887b. A contribution to the history of the Vertebrata of the Trias of North America. *Proceedings of the American Philosophical Society*, **24**: 221–227.
- Cope, E.D. 1889. On a new genus of Triassic Dinosauria. *American Naturalist*, **23**: 626.
- Hay, O.P. 1930. *Second bibliography and catalogue of the fossil Vertebrata of North America*. Publication No. 390, vol. 2. Carnegie Institution of Washington.
- Huene, F. von. 1915. On reptiles of the New Mexican Trias in the Cope Collection. *Bulletin of the American Museum of Natural History*, **34**: 485–507.
- Hunt, A. & Lucas, S. 1991. *Rioarribasaurus*, a new name for a late Triassic dinosaur from New Mexico (USA). *Palaeontologische Zeitschrift*, **65**: 191–198.
- Padian, K. 1986. On the type material of *Coelophysis* Cope (Saurischia; Theropoda) and a new specimen from the Petrified Forest of Arizona (Late Triassic: Chinle Formation). Pp. 45–60 in Padian, K. (Ed.), *The beginning of the age of dinosaurs. Faunal change across the Triassic-Jurassic boundary*. Cambridge University Press, Cambridge.
- Rowe, T. & Gauthier, J.A. 1990. Ceratosauria. Pp. 151–168 in Weishampel, D.B., Dodson, P. & Osmolska, H. (Eds.), *The Dinosauria*. University of California Press, Berkeley.
- Schwartz, H.L. & Gillette, D.D. 1992. Geology and taphonomy of the *Coelophysis* quarry, Upper Triassic Chinle Formation, Ghost Ranch, New Mexico. *Journal of Paleontology* (in press).
- Welles, S.P. 1984. *Dilophosaurus wetherilli* (Dinosauria, Theropoda) osteology and comparisons. *Palaeontographica*, (A)**185**: 85–180.

Case 2857

***Scelidosaurus harrisonii* Owen, 1861 (Reptilia, Ornithischia): proposed replacement of inappropriate lectotype**

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Abstract. The purpose of this application is to conserve the use of the name *Scelidosaurus harrisonii* Owen, 1861 for the ornithischian dinosaur to which it is invariably applied. The existing lectotype, misguidedly designated by Lydekker (1888), is a mere fragment now known to represent a bipedal theropod dinosaur phylogenetically remote from *Scelidosaurus* Owen, 1859 (type species *S. harrisonii*) as generally envisaged. A new lectotype is proposed, a nearly complete skeleton (presently a paralectotype) in the Natural History Museum, London, on which the concept of *Scelidosaurus* has always been based.

1. Owen (1859), in an article on 'Palaeontology' in the *Encyclopaedia Britannica*, introduced (p. 150) the generic name *Scelidosaurus* in the following terms: 'Genus SCELIDOSAURUS, Ow. — By this name is indicated a Saurian with large and hollow limb-bones, with a femur having the third inner trochanter, and with metacarpal and phalangeal [sic] bones, adapted for movement on land. The fossils occur in the lias at Charmouth, Dorsetshire'. No specific name was mentioned. This description, which was repeated in 1860 (p. 258), applies also to other dinosaur genera known at that time and in consequence does not differentiate *Scelidosaurus* from those genera; nevertheless, it satisfies the criteria of availability, and *Scelidosaurus* Owen, 1859 should be cited with that date of publication. This contrasts with the views of authors such as Newman (1968, p. 40), who, acting on the incorrect advice of Charig, gave 1861 (see para. 2 below) as the date of first valid publication of the name *Scelidosaurus* and listed *Scelidosaurus* Owen, 1859 as a nomen nudum.

2. In 1861 Owen (p. 1) established the new species *Scelidosaurus harrisonii* on the incomplete remains of five fossil reptiles, all stated to have come from the upper part of the Lower Lias in the vicinity of Charmouth; the material was described as fully as its only partly developed state would permit and it was well illustrated. Owen did not designate a holotype, and the type series therefore consisted of five syntypes. *S. harrisonii* is the type species of the genus by subsequent monotypy.

3. The most informative syntype in the series was a nearly complete skull and lower jaw (pp. 7–14), lacking only the tip of the snout, and crudely developed to some degree

with hammer and chisel. The other syntypes were a femur (pp. 2–3); a knee-joint (pp. 3–4); an ungual phalanx (p. 5); and (pp. 5–7) remains which, according to Owen, ‘most probably formed part of a very young or foetal *Scelidosaurus*’.

4. A postcranial skeleton belonging to the same individual as the skull was recovered shortly afterwards; this, like the skull itself, was prepared according to the techniques then in use and was described as fully as possible by Owen (1863). At that time the skull and skeleton (presently no. R.1111 in the Palaeontology Department of the Natural History Museum, London) together represented the most complete individual dinosaur ever found in Britain; that may still be true today, 129 years later. It is upon this unique individual and this alone that our present concept of *Scelidosaurus* rests. We propose the designation of this specimen as the replacement lectotype of *Scelidosaurus harrisonii*.

5. Another specimen (BM(NH) Pal. Dept. no. 39496) in Owen’s 1861 material was the isolated knee-joint (i.e. the distal end of the femur in articulation with the proximal ends of the tibia and fibula), as mentioned in para. 3. Lydekker (1888, p. 182) described it thus: ‘The adjacent extremities of the right femur, tibia and fibula, cemented together by matrix, of a large individual; from Charmouth. The type; figured by Owen, op. cit. pt. i, pl. ii, figs. 1–3’. The surprising fact that Lydekker really did consider this specimen to be the type is made clear by his Catalogue entry (p. 181) for R.1111, which states: ‘This specimen indicates an individual much smaller than the type [39496], its total length being about 11 feet 3 inches’. Lydekker’s reasons for choosing the knee-joint as ‘the type’ are unknown (as noted above, it was far from being the best of Owen’s syntypic series, nor was it the first specimen mentioned in his published description); it may have been because of the larger size of the original animal, or he may simply have made a mistake. Intentional or not, his action constitutes designation of a lectotype under Article 74a of the Code; the knee-joint is thus the lectotype of *S. harrisonii*, and Owen’s four other syntypes (including R.1111) are paralectotypes.

6. Woodward & Sherborn (1890) followed Lydekker in his mistaken belief (or unexplained action); their stated practice (p. xxii) was to indicate ‘the type specimen of each accepted species... in square brackets after the record of the locality’, which in this case they gave (p. 283) as ‘[Right femur, tibia, and fibula; Brit. Mus.]’.

7. Eighty years after Lydekker’s designation of the knee-joint as the lectotype it was discovered by Newman (1968) that this specimen, developed out of the rock by acetic acid (pl. 7, fig. 2), was derived from an entirely different type of animal — a bipedal theropod dinosaur rather than an ornithischian. The consequences of this revised identification are as follows: (a) *Scelidosaurus* Owen, 1859 is a junior subjective synonym of *Megalosaurus* Buckland, 1824; (b) *S. harrisonii* may be a synonym of *M. bucklandi* von Meyer, 1832, the type species of *Megalosaurus*; and (c) the ornithischian dinosaur always known as *S. harrisonii* has no available name.

8. Much of the anatomy of specimen R.1111 remains undescribed, for it was still encased in hard limestone in Owen’s time; indeed, some elements (such as the pubis and ischium) were completely hidden and their presence could only be surmised. During the nineteen-sixties, however, the senior author (A.J.C.) instigated the complete chemical development and redescription of the specimen, and most of the missing elements were subsequently revealed in a generally excellent state of preservation; the development is now almost finished, with only one block still requiring treatment. When the osteology of *Scelidosaurus* is eventually published it will be better known than that of almost any

other dinosaur, and considerably better than that of many extant reptiles. It was upon fossil vertebrates from the Lower Lias of Lyme Regis and Charmouth that the techniques of acid preparation were first worked out (Toombs, 1948; Rixon, 1949; Toombs & Rixon, 1959), and R.1111 — in particular its skull — is the supreme example of a superbly preserved specimen prepared by those techniques.

9. In recent years new material of the genus has been discovered in southern England. One such find is the so-called 'small *Scelidosaurus*' or 'juvenile *Scelidosaurus*' BM(NH) Pal. Dept. no. R.6704 (referred to in Rixon, 1968; Charig, 1972 (pp. 123, 138–140); Thulborn, 1977; Charig, in preparation); another is a specimen of the neck region (a part of the animal that is mostly lacking in R.1111) acquired by the Natural History Museum, London, from the Japanese dealer Ryoichi Ebisawa; a third specimen is in the Bristol City Museum. A closely related genus (*Emausaurus* Haubold, 1990) has been described from the Upper Lias (Lower Toarcian) of northern Germany.

10. It was upon the 'small *Scelidosaurus*' that the discovery was made (Charig, 1972, pp. 123–124) that the ornithischian pubis — the most characteristic feature of that order — was primitively without a properly developed anterior ramus. This confirmed the belief that the posterior ramus represents the true pubis, rotated backwards.

11. *Scelidosaurus* is an important and much discussed genus, as shown by the following:

- (1) at the time of its discovery and original description specimen R.1111 was not only one of the most complete dinosaur skeletons known but also represented a dinosaur quite unlike any other found previously (or indeed since, apart from a few very close relatives found all much less complete in rocks of similar age);
- (2) until Broom (1911) described *Geranosaurus*, *Scelidosaurus* was the geologically oldest ornithischian dinosaur known;
- (3) *Scelidosaurus* remains at the centre of the controversies surrounding the origin and early radiation of the Ornithischia, the relationships between the major subdivisions of the Thyreophora, and the vexed question of whether or not the quadrupedal ornithischians were primarily or secondarily quadrupedal;
- (4) it is the type genus of the family SCOLIDOSAURIDAE Huxley, 1869 (Cope was actually the first to use the family name, in a two-part lecture read in September 1868 and April 1869 but not published until December 1871; see p. 91 of that work), and is also the basis of the higher taxon Scelidosauria of some authors;
- (5) *Scelidosaurus* appears not only in esoteric articles: it is often mentioned and illustrated in popular works (indeed, models of the restored animal can be bought in museum shops), and it is therefore not unknown to the general public.

12. In view of the above it is highly desirable that the accepted nomenclature, as used at present by everyone, should be conserved. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to set aside all previous designations of a lectotype of *Scelidosaurus harrisonii* Owen, 1861;
- (2) to confirm the designation in para. 4 above of the skull and skeleton BM(NH) Pal. Dept. no. R.1111 in the Natural History Museum, London, as the replacement lectotype;
- (3) to place on the Official List of Generic Names in Zoology the name *Scelidosaurus* Owen, 1859 (gender: masculine), type species by subsequent monotypy *Scelidosaurus harrisonii* Owen, 1861;

- (4) to place on the Official List of Specific Names in Zoology the name *harrisonii* Owen, 1861, as published in the binomen *Scelidosaurus harrisonii* and as defined by the lectotype confirmed in (2) above (specific name of the type species of *Scelidosaurus* Owen, 1859).

References

- Broom, R. 1911. On the dinosaurs of the Stormberg, South Africa. *Annals of the South African Museum*, 7: 291–308.
- Buckland, W. 1824. Notice on the *Megalosaurus* or great fossil lizard of Stonesfield. *Transactions of the Geological Society of London*, (2)1: 390–396.
- Charig, A.J. 1972. The evolution of the archosaur pelvis and hind-limb: an explanation in functional terms. Pp. 121–155 in Joysey, K.A. & Kemp, T.S. (Eds.), *Studies in vertebrate evolution: essays presented to Dr F.R. Parrington, F.R.S.* 284 pp. Oliver & Boyd, Edinburgh.
- Cope, E.D. 1871. Synopsis of the extinct Batrachia, Reptilia and Aves of North America. *Transactions of the American Philosophical Society*, (2)14: 1–252.
- Haubold, H. 1990. Ein neuer Dinosaurier (Ornithischia, Thyreophora) aus dem unteren Jura des nördlichen Mitteleuropa. *Revue de Paléobiologie*, 9(1): 149–177.
- Huxley, T.H. 1869. On the Dinosauria of the Trias, with observations on the classification of the Dinosauria. *Nature*, 1: 146.
- Lydekker, R. 1888. *Catalogue of the fossil Reptilia and Amphibia in the British Museum (Natural History)*, part 1. xxviii, 309 pp. British Museum (Natural History), London.
- Meyer, H. von. 1832. *Palaeologica zur Geschichte der Erde und ihrer Geschöpfe*. xii, 560 pp. Schmerber, Frankfurt am Main.
- Newman, B.H. 1968. The Jurassic dinosaur *Scelidosaurus harrisoni*, Owen. *Palaeontology*, 11: 40–43.
- Owen, R. 1859. *Palaeontology*. Pp. 91–176 in: *Encyclopaedia Britannica* (Ed. 8), vol. 17. 815 pp. Adam & Charles Black, Edinburgh.
- Owen, R. 1860. *Palaeontology or a systematic summary of extinct animals and their geological relations*. xv, 420 pp. Adam & Charles Black, Edinburgh. [Also Ed. 2, 1861.]
- Owen, R. 1861. A monograph of a fossil dinosaur (*Scelidosaurus harrisonii*, Owen) of the Lower Lias. In: A monograph of the fossil Reptilia of the Liassic Formations. *Monograph of the Palaeontographical Society*, 1: 1–14.
- Owen, R. 1863. A monograph of a fossil dinosaur (*Scelidosaurus harrisonii*, Owen) of the Lower Lias. Part II. In: A monograph of the fossil Reptilia of the Liassic Formations. *Monograph of the Palaeontographical Society*, 2: 1–26.
- Rixon, A.E. 1949. The use of acetic and formic acids in the preparation of fossil vertebrates. *Museums Journal*, 49(5): 116.
- Rixon, A.E. 1968. The development of the remains of a small *Scelidosaurus* from a Lias nodule. *Museums Journal*, 67(4): 315–321.
- Thulborn, R.A. 1977. Relationships of the Lower Jurassic dinosaur *Scelidosaurus harrisonii*. *Journal of Paleontology*, 51(4): 725–739.
- Toombs, H.A. 1948. The use of acetic acid in the development of vertebrate fossils. *Museums Journal*, 48(3): 54–55.
- Toombs, H.A. & Rixon, A.E. 1959. The use of acids in the preparation of vertebrate fossils. *Curator*, 2(4): 304–312.
- Woodward, A.S. & Sherborn, C.D. 1890. *A catalogue of British fossil Vertebrata*. xxxv, 396 pp. Dulau, London.

Case 2814***Pseudoxyrhopus* Günther, 1881 (Reptilia, Serpentes): proposed conservation**

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Abstract. The purpose of this application is to conserve the generic name *Pseudoxyrhopus* Günther, 1881. The name is in current universal usage for a genus of snakes from Madagascar but was originally published as an unnecessary replacement for *Homalocephalus* Jan, 1863, which has not been used for over 100 years.

1. The generic name *Homalocephalus* Jan, 1863a (p. 286) was proposed for the single new species *H. heterurus* Jan, 1863. The name was used by the author in two later publications (Jan, 1863b, p. 52; Jan & Sordelli, 1866, pl. 4, fig. 2) but has appeared in only two other publications in the primary literature (Boettger, 1877, p. 32; Hoffmann, 1886, p. 1679).

2. The taxonomic genus to which Jan (1863) applied the name *Homalocephalus* is valid and has been recognized as such consistently. Günther (1881, p. 359), however, proposed a replacement name, *Pseudoxyrhopus*, explaining that 'Jan described under the name *Homalocephalus* a genus of Colubrine Snakes from Madagascar... whilst admitting the snake described by him as the type of a distinct genus, I am compelled to change the name, which is preoccupied in Entomology'. Günther did not mention the insect name but it seems likely that he was referring to *Homalocephala* Zetterstedt, 1838 (col. 749) in the Diptera; there is no name *Homalocephalus* other than Jan's (1863). Hoge (1958, p. 51) recorded *Pseudoxyrhopus* as a 'nomen novum pro *Homalocephalus* Jan 1863, non Zetterstedt 1838'. Williams & Wallach (1989, p. 125) noted that *Pseudoxyrhopus* was a 'substitute name for *Homalocephalus* Jan; erroneously believed to be preoccupied by *Homalocephala* Zetterstedt (1838) Diptera'. They also noted that the name *Pseudoxyrhopus* 'needs conservation'. The 1985 Code (as well as previous

editions) states (Article 56b) that genus-group names differing by one letter are not to be regarded as homonyms.

3. Günther (1881) established the new name *microps* for a second species of *Pseudoxyrhopus*; this was erroneously cited as the type species of the genus by Welch (1982, p. 182). Under Article 67h *Homalocephalus heterurus* Jan, 1863 is the type species of both *Homalocephalus* and *Pseudoxyrhopus*.

4. Compliance with the principle of priority would require the use of the senior name *Homalocephalus* Jan, 1863. However, with the single exception of Hoffmann (1886), *Pseudoxyrhopus* Günther, 1881 has consistently been used in all works in which the genus has been regarded as distinct. There are eight nominal species in the genus, all endemic to Madagascar (see Brygoo, 1983, pp. 37, 55). An additional species, *Xenodon punctatus* Peters, 1880, included in the genus by Boulenger (1890, p. 314), Guibé (1959, pp. 227–228) and Welch (1982, p. 182), has been shown (Hoge, 1958, pp. 49–52) to belong in the unrelated genus *Sordellina* Procter, 1923 from Brazil.

5. A cursory review of the literature reveals that *Pseudoxyrhopus* Günther, 1881 has been used as valid in at least 34 works by 30 authors since it was proposed. Recent authors include Bellairs (1969, p. 540), Blanc (1971, pp. 122, 126), Brygoo (1987, pp. 9, 12), Domergue (1969, pp. 16, 17, 20), McDowell (1987, p. 37), Romer (1956, p. 58) and Underwood (1967). A list of a further 20 references, additional to those cited in the course of this application, is held by the Commission Secretariat. *Pseudoxyrhopus* is the type genus of the family-group (tribe or subfamily) PSEUDOXYRHOPINI or PSEUDOXYRHOPINAE Dowling, 1975 (p. 169) which includes nine genera (Dowling, 1986). The family-group name has appeared in further publications (Smith, Smith & Sawin, 1977, p. 118 and Dowling, Highton, Maha & Maxson, 1983, p. 323).

6. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to suppress the generic name *Homalocephalus* Jan, 1863 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) to place on the Official List of Generic Names in Zoology the name *Pseudoxyrhopus* Günther, 1881 (gender: masculine), type species by monotypy of the replaced nominal genus *Homalocephalus* Jan, 1863, *Homalocephalus heterurus* Jan, 1863;
- (3) to place on the Official List of Specific Names in Zoology the name *heterurus* Jan, 1863, as published in the binomen *Homalocephalus heterurus* (specific name of the type species of *Pseudoxyrhopus* Günther, 1881);
- (4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Homalocephalus* Jan, 1863, as suppressed in (1) above.

References

- Bellairs, A. d'A. 1969. *The life of reptiles*, vol. 2. Pp. 283–590. Weidenfeld & Nicolson, London.
- Blanc, C.P. 1971. Les reptiles de Madagascar et des îles voisines. *Annales de l'Université de Madagascar*, 8: 95–178.
- Boettger, O. 1877. Die Reptilien und Amphibien von Madagascar. *Abhandlungen herausgegeben von der Senckenbergischen Naturforschenden Gesellschaft*, 11: 1–56.
- Boulenger, G.A. 1890. On the Ophidian genus *Pseudoxyrhopus*, Gthr. *Annals and Magazine of Natural History*, (6)6(34): 311–314.

- Brygoo, E.R. 1983. Les ophidiens de Madagascar. *Memórias do Instituto Butantan*, **46**: 19–58.
- Brygoo, E.R. 1987. L'endémisme des reptiles de Madagascar. *Bulletin de la Société Zoologique de France*, **112**(1–2): 5–38.
- Domergue, C.A. 1969. Clé simplifiée pour la détermination sur le terrain des serpents communs de Madagascar. *Bulletin de l'Académie Malagache*, **45**(2): 13–26.
- Dowling, H.G. 1975. A provisional classification of snakes. *Yearbook of Herpetology*, **1**: 167–170.
- Dowling, H.G. 1986. *Prodromus of a new classification of Serpentes*. II (Arrangement of genera). 22 pp. Unpublished ms.
- Dowling, H.G., Highton, R., Maha, G.C. & Maxson, L.R. 1983. Biochemical evaluation of colubrid snake phylogeny. *Journal of Zoology*, **201**: 309–329.
- Guibé, J. 1959. Les serpents de Madagascar. *Mémoires de l'Institut Scientifique de Madagascar*, (A)**12**: 189–260.
- Günther, A.C.L.G. 1881. Seventh contribution to the knowledge of the fauna of Madagascar. *Annals and Magazine of Natural History*, (5)**7**(41): 357–360.
- Hoffmann, C.K. 1886. Reptilien. III. Schlangen und Entwicklungsgeschichte der Reptilien. Pp. 1569–1680 in: *H.G. Bronn's Klassen und Ordnungen des Thier-Reichs*, vol. 6, part 3, Lieferungen 50–53. Winter, Leipzig.
- Hoge, A.R. 1958. Die systematische Stellung von *Xenodon punctatus* Peters 1880 und *Philodryas taeniatus* Hensel 1868. *Mitteilungen aus dem Zoologischen Museum in Berlin*, **34**(1): 49–56.
- Jan, G. 1863a. Enumerazione sistematica degli ofidi appartenenti al gruppo Coronellidae. *Archivio per la Zoologia, l'Anatomia e la Fisiologia*, **2**(2): 211–330.
- Jan, G. 1863b. *Elenco sistematico degli ofidi descritti e disegnati per l'iconografia generale*. 143 pp. Lombardi, Milan.
- Jan, G. & Sordelli, F. 1866. *Iconographie générale des ophidiens*, vol. 1, livraison 17. 6 pls. Bailliére, Paris.
- McDowell, S.B. 1987. Systematics. Pp. 3–50 in Seigel, R.A., Collins, J.T. & Novak, S.S., *Snakes: ecology and evolutionary biology*. xiv, 529 pp. Macmillan, New York.
- Romer, A.S. 1956. *Osteology of the reptiles*. 772 pp. University of Chicago, Chicago.
- Smith, H.M., Smith, R.B. & Sawin, H.L. 1977. A summary of snake classification (Reptilia, Serpentes). *Journal of Herpetology*, **11**(2): 115–121.
- Underwood, G. 1967. *A contribution to the classification of snakes*. x, 179 pp. British Museum (Natural History), London.
- Welch, K.R.G. 1982. *Herpetology of Africa: a checklist and bibliography of the orders Amphisbaenia, Sauria and Serpentes*. x, 293 pp. Krieger, Malabar, Florida.
- Williams, K.L. & Wallach, V. 1989. *Snakes of the world*, vol. 1 (Synopsis of snake generic names). viii, 234 pp. Krieger, Malabar, Florida.
- Zetterstedt, J.W. 1838. Sectio Tertia (Diptera). Conspectus familiarum et generum dipterorum Lapponiae. Cols. 496–868 in: *Insecta Lapponica descripta*. Voss, Lipsiae.

**Comments on the date of publication of John McCrady's hydrozoan paper
*Gymnophthalmata of Charleston Harbor***

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In an application (BZN 48: 192–195) by Cernohorsky, Cornelius & Sysoev to remove the homonymy between CLAVIDAE McCrady, 1859 (Hydrozoa) and CLAVINAE Casey, 1904 (Mollusca) the uncertain dating of McCrady's paper in which the name was published was briefly discussed. The matter is of nomenclatural relevance because the dates of two classic papers on Hydrozoa published by McCrady in the same journal, in which approximately 40 new names were established, have been variously cited as 1856, 1857, 1858 or 1859.

McCrady's paper *Gymnophthalmata of Charleston Harbor* is a key work in the taxonomy of hydroids and hydromedusae. Besides CLAVIDAE, new names for three other families, nine genera and 28 species were published, many of which are valid today (see Stephens & Calder, 1992, pp. 44, 45). The date on the cover of vol. 1 of the *Proceedings of the Elliott Society of Natural History of Charleston, South Carolina*, in which McCrady's paper appeared, is given as 1859. Cernohorsky et al. provisionally adopted 1859 as the date but they referred (para. 3) to unspecified evidence indicating that parts of the *Proceedings* were published piecemeal before their eventual inclusion in the completed volume. Evidence indicates that vol. 1 of the *Proceedings* was indeed published in parts, between 1856 and 1859, but we have concluded that the number including McCrady's Charleston Harbor paper did not appear until 1859. The date of McCrady's work (1859) given in the application is therefore correct.

The first number of vol. 1 of the *Proceedings* was published no later than 6 June 1856. A meeting of the Elliott Society on that date recorded (*Proceedings*, 1: 30; 1859): 'the Secretary reported the first number of the proceedings as published, and distributed to members, correspondents, and many learned Societies, both in Europe and America'. The *Proceedings of the Boston Society of Natural History* (5: 400; 1856) recorded under 'Books received during the quarter ending June 31 (sic), 1856... Proceedings of the Elliott Society No. 1, 8vo, pp. 1–24'. Thus, Number 1 contained pages 1–24 and covered the proceedings from 1 November 1853 to 24 July 1855.

The *Proceedings of the Elliott Society* does not mention the publication of Number 2. However, listed among 'Books received during the quarter ending Dec. 31, 1856' in the *Proceedings of the Boston Society of Natural History* (6: 95; 1857) was 'Proceedings of the Elliott Society, pp. 25–46. 8vo. Pamph.'. Number 2 therefore contained pages 25–46 and covered the proceedings from 18 January 1856 to 30 July 1856.

Several records exist pertaining to the publication of Number 3. The *Proceedings of the Academy of Natural Sciences of Philadelphia* (9: Appendix, ix; 1858) reported that on 'Sept. 15th 1857' the Academy received the 'Proceedings of the Elliott Society, pp. 49–104'. Number 3 thus contained pages 49–104 and included proceedings from 14 November 1856 to 1 April 1857. It incorporated (pp. 55–90, pls. 4–7) a detailed account of the well known hydrozoan *Turritopsis nutricula* McCrady, 1857 (see Calder, 1988, pp. 8–10, figs. 5, 6; Stephens & Calder, 1992, p. 42).

It is not clear whether the Elliott Society intended to publish a fourth number before issuing a complete first volume. We are not aware that it did so. At the meeting of 2 August 1858 the Corresponding Secretary read a letter (dated 24 July) from William Sharswood in Philadelphia saying 'the fourth part of the proceedings has not been received, if published' (*Proceedings*, 1: 288; 1859). By the spring of 1859 the entire first volume was published. A local newspaper, the *Charleston Mercury*, reported on 16 May 1859 that as of 11 May 'the first volume of the Proceedings is now complete, and... all numbers after the third can be obtained at Russell & Jones', King-Street' (see Stephens & Calder, 1992, p. 50). The volume as published contained 294 pages of text, a seven-page index and 14 plates. It included proceedings from 1 November 1853 to 15 December 1858. We conclude that the final material (pp. 103–294), which included McCrady's paper *Gymnophthalmata of Charleston Harbor* (pp. 103–221), was published no later than 11 May 1859.

The date of 1859 differs from that (1857) previously given for the publication of McCrady's paper (Stephens & Calder, 1992, pp. 44, 50, 53). However, the later date is supported by footnotes, dated June 1858, added by McCrady to pp. 105 and 125 of his paper. The first referred to 'the delay which has unavoidably attended the publication of this paper', which had been presented orally to the Society in spring 1857.

Acknowledgement

We thank P.F.S. Cornelius, London, for his review of an early draft of this comment.

References

- Calder, D.R. 1988. Shallow-water hydroids of Bermuda: the Athecatae. *Life Sciences Contributions. Royal Ontario Museum*, 148: 1–107.
- McCrady, J. 1857. Description of *Oceania* (*Turritopsis*) *nutricula* nov. spec. and the embryological history of a singular medusan larva, found in the cavity of its bell. *Proceedings of the Elliott Society of Natural History of Charleston, South Carolina*, 1: 55–90.
- Stephens, L.D. & Calder, D.R. 1992. John McCrady of South Carolina: pioneer student of North American Hydrozoa. *Archives of Natural History*, 19(1): 39–54.

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Secretariat, International Commission on Zoological Nomenclature

McCrady's Charleston Harbor paper was presented to members of the Elliott Society at a meeting on 15 April 1857. My findings from a British journal corroborate those of Calder et al. that the main portion of this paper (pp. 105–221, pls. 8–12) did not appear until 1859, but there is evidence that the first two pages (pp. 103, 104) of the work were published in 1857. No new names were included in the first two pages.

The Linnean Society of London was one organisation to which pre-1859 publications of the Elliott Society were sent. The register of 'Presents made to the Linnean Society 17 February 1852 - 6 November 1861' records the receipt of the proceedings of the Elliott Society, including 'sheets 7-11. 1856-57. 8vo' on 5 November 1857. Examination of the (1859) published vol. 1 of the *Proceedings* shows that signatures (or 'sheets') 7-11 comprise pp. 49-104; this was the part received by the Academy of Natural Sciences of Philadelphia on 15 September 1857 (see preceding comment). It is apparent that the first two pages (pp. 103, 104) of McCrady's paper appeared in 1857, although publication of the remainder was delayed until 1859. This is borne out by the two footnotes (pp. 105, 125), dated June 1858, deploring the delay. A reprint of McCrady's paper (pages renumbered 1-119; the index, pp. i-iii, cites the renumbered pagination) bears a third footnote (p. 2), also dated June 1858: 'The second page of this paper was published in the *Proceedings of the Elliott Society of Natural History*, in 1857. Unforeseen circumstances having retarded the publication of that Journal since the appearance of this second page, I have been enabled to introduce into this Monograph several new genera and species, discovered since that time [1857], as well as to make some important alterations in the text from comparatively recent information. This will account for the small number of genera [14] and species [19] here mentioned [p. 2], in comparison to the actual number which follows'.

Reference

McCrady, J. 1857, 1859. Gymnophthalmata of Charleston Harbor. *Proceedings of the Elliott Society of Natural History of Charleston, South Carolina*, 1: 103-104 (1857); 105-221 (1859).

Comment on the proposed confirmation of unavailability of the name *Fusus* Helbling, 1779 (Mollusca, Gastropoda)

(Case 2729; see BZN 48: 92-96, 244-246; 49: 68-70, 221-222)

Riccardo Giannuzzi-Savelli

Via Mater Dolorosa 54, 90146 Palermo Pallavicino, Italy

I fully agree with the proposals of Beu, Marshall & Ponder (BZN 49: 68-70). To accept the names *Fusinus* Rafinesque, 1815 and *Colubraria* Schumacher, 1817 is the solution that best serves nomenclatural stability.

Comment on the proposed conservation of the specific name of *Melanella* (*Balcis*) *alba* (Da Costa, 1778) (Mollusca, Gastropoda)

(Case 2526; see BZN 49: 112-115)

Riccardo Giannuzzi-Savelli

Via Mater Dolorosa 54, 90146 Palermo Pallavicino, Italy

I strongly support Warén's application for the conservation of the specific name of *Strombiformis albus* Da Costa, 1778.

Dr Warén has produced an excellent and well-written presentation of the case and I agree that the name *albus* should be maintained. A well entrenched name should not be abandoned without exceptional reasons as such a change would result in much confusion, more than is justified by a strict adherence to the priority principle.

Comment on the proposed attribution of the specific name of *Ceratites nodosus* (Cephalopoda, Ammonoidea) to Schlotheim, 1813, with the designation of a lectotype (Case 2732; see BZN 48: 31–35, 246; 49: 145–149)

G. Tichy

Institut für Geologie und Paläontologie, Universität Salzburg, Hellbrunnerstrasse 34/III, A-5020, Salzburg, Austria

The transfer of the specific name of *Ceratites* (*Ceratites*) *nodosus* to *Ceratites* (*Doloceratites*) *robustus* Riedel, 1916, which is the consequence of Tozer's proposals (BZN 49: 148), would result in confusion rather than stability. I support the application by Ulrichs (BZN 48: 31–35) to conserve the established usage of the name *nodosus*.

Comments on the proposed conservation of *Chrysobothris* and *Dicerca* Eschscholtz, 1829 (Insecta, Coleoptera) as the correct original spellings (Case 2772; see BZN 49: 120–121)

(1) Richard L. Westcott

Oregon Department of Agriculture, 635 Capitol Street NE, Salem, Oregon 97310–0110, U.S.A.

Dr Nelson has proposed the conservation of the accepted spellings of *Chrysobothris* and *Dicerca*. He has provided sound reasoning for this and I support him wholeheartedly. I know that all my colleagues, worldwide, feel the same. As pointed out by Nelson, those spellings have been in use since 1833 and 1835 respectively, with only two exceptions. The latest exception (Leraut, 1983) was an unfortunate and ill-advised endeavor by someone who, I understand, is not even a coleopterist, let alone a specialist in the BUPRESTIDAE.

The genus *Dicerca* is Holarctic, with 27 species Nearctic and 16 Palearctic. They are medium-sized buprestids which are popular with collectors. Much literature on this group exists, although I am not aware that any species are of economic importance. On the other hand, *Chrysobothris* contains hundreds of diverse species worldwide, some of which are very serious pests. The literature on the genus is overwhelming.

Nobody, least of all science, would be served by regressing to the original, obviously misspelled, names. I trust the Commission will uphold Dr Nelson's proposals.

(2) Svatopluk Bílý

National Museum, Kunratic 1, 148 00 Praha 4, Czechoslovakia

I support the conservation of both *Chrysobothris* and *Dicerca* for the reasons given by Dr Nelson; this will keep the nomenclature stable.

Comment on the proposed replacement of the lectotype of *Leptocera* (*Rachispoda*) *limosa* (Fallén, 1820) (Insecta, Diptera)
(Case 2803; see BZN 49: 127–128)

Terry A. Wheeler

Department of Biology, Carleton University, Ottawa, Ontario, Canada K1S 5B6

I support Kim & Roháček's proposal to replace the lectotype of *Copromyza limosa* Fallén. Most North American workers with the exception of Gapasin & Kim (1972; not cited in the application) have used the name *limosa* as defined by Duda (1918). In studies on the New World *Rachispoda* I have found *limosa* and *lutosa* to be widespread in North America, with *limosa* at least partly synanthropic. Synonymy of *limosa* and *lutosa* through acceptance of Kim's lectotype designation would cause unnecessary confusion in the status of these common species.

Gapasin & Kim (1972, published 15 November) addressed the status of, among other species, *limosa* and *lutosa*, including lectotype designations for both species (which were unnecessary in view of Kim's earlier designations published on 14 July 1972). The incorrect redescription and illustrations of *limosa* by Gapasin & Kim were in accord with the mistaken lectotype designation.

Additional references

Gapasin, D.P. & Kim, K.C. 1972. Taxonomic notes on five common Holarctic species of *Leptocera* (Diptera: Sphaeroceridae). *Annals of the Entomological Society of America*, **65**: 1245–1258.

Comment on the proposed conservation of *Dinodontosaurus* Romer, 1943 (Reptilia, Synapsida)

(Case 2807; see BZN 49: 52–54)

S. Bandyopadhyay

Geological Studies Unit, Indian Statistical Institute, 203 Barrackpore Trunk Road, Calcutta 700 035, India

I strongly feel that Dr Lucas is quite right regarding the status of the name *Dinodontosaurus*, which should be conserved because of its wide acceptance and usage. I support his arguments and proposal.

OPINION 1697

***Chelifer museorum* Leach, 1817 (currently *Cheiridium museorum*; Arachnida, Pseudoscorpionida): specific name conserved**

Ruling

(1) Under the plenary powers the specific name *nepoides* Hermann, 1804, as published in the binomen *Chelifer nepoides*, is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The name *Cheiridium* Menge, 1855 (gender: neuter), type species by subsequent designation by Simon (1879) *Chelifer museorum* Leach, 1817, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *museorum* Leach, 1817, as published in the binomen *Chelifer museorum* (specific name of the type species of *Cheiridium* Menge, 1855), is hereby placed on the Official List of Specific Names in Zoology.

(4) The name *nepoides* Hermann, 1804, as published in the binomen *Chelifer nepoides* and as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 2791

An application for the conservation of the specific name of *Chelifer museorum* Leach, 1817 was received from Dr Mark S. Harvey (*Western Australian Museum, Perth, Australia*) on 1 October 1990. After correspondence the case was published in BZN 48: 103–104 (June 1991). Notice of the case was sent to appropriate journals. No comments were received.

It was noted on the voting paper that the syntype of *Chelifer museorum* Leach, 1817 in the Natural History Museum, London is no. 138 (Leach collection).

Decision of the Commission

On 1 March 1992 the members of the Commission were invited to vote on the proposals published in BZN 48: 103–104. At the close of the voting period on 1 June 1992 the votes were as follows:

Affirmative votes — 26: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Dupuis, Hahn, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Trjapitzin, Uéno, Willink

Negative votes — 2: Macpherson and Thompson.

No vote was received from Halvorsen.

Kabata commented that he voted for the proposal because of the absence of the original specimens on which Hermann (1804) based his description of *Chelifer nepoides* (para. 1 of the application); otherwise he did not believe that a return to the earlier name would result in undue confusion.

Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

Cheiridium Menge, 1855, *Neueste Schriften der Naturforschenden Gesellschaft*, 5(2): 36.

museorum, *Chelifer*, Leach, 1817, *The zoological miscellany; being descriptions of new or interesting animals*, vol. 3, p. 50.

nepoides, *Chelifer*, Hermann, 1804, *Mémoire Aptérologique*, p. 116.

The following is the reference for the designation of *Chelifer museorum* Leach, 1817 as the type species of the nominal genus *Cheiridium* Menge, 1855:

Simon, E. 1879. *Les arachnides de France*, vol. 7 (Les ordres des chernetes, scorpiones et opiliones), p. 43.

OPINION 1698

***Brahmaea* Walker, 1855 (Insecta, Lepidoptera): *Bombyx certhia* Fabricius, 1793 confirmed as the type species**

Ruling

(1) It is hereby confirmed that the nominal species *Bombyx certhia* Fabricius, 1793, designated by Hampson ([1893]), is the type species of the nominal genus *Brahmaea* Walker, 1855.

(2) The name *Brahmaea* Walker, 1855 (gender: feminine), type species by subsequent designation by Hampson ([1893]) *Bombyx certhia* Fabricius, 1793, as confirmed in (1) above, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *certhia* Fabricius, 1793, as published in the binomen *Bombyx certhia* (specific name of the type species of *Brahmaea* Walker, 1855), is hereby placed on the Official List of Specific Names in Zoology.

History of Case 2737

An application for the confirmation of Hampson's ([1893]) designation of *Bombyx certhia* Fabricius, 1793 as the type species of *Brahmaea* Walker, 1855 was received from Drs W.A. Nässig (*Zoologisches Institut der Universität, Frankfurt, Germany*) and I.W.B. Nye (*South Nutfield, Surrey, U.K.*) on 16 August 1989. After correspondence the case was published in BZN 48: 137–139 (June 1991). Notice of the case was sent to appropriate journals. No comments were received.

Decision of the Commission

On 1 March 1992 the members of the Commission were invited to vote on the proposals published in BZN 48: 138. At the close of the voting period on 1 June 1992 the votes were as follows:

Affirmative votes — 29: Bayer, Bock, Bouchet, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Macpherson, Mahnert, Martins de Souza, Minelli, Nielsen, Nye, Ride, Savage, Schuster, Starobogatov, Štys, Thompson, Trjapitzin, Uéno, Willink

Negative votes — none.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

Brahmaea Walker, 1855, *List of the specimens of lepidopterous insects in the collection of the British Museum*, vol. 5, p. 1200.

certhia, *Bombyx*, Fabricius, 1793, *Entomologia systematica emendata et aucta*, vol. 3, part 1, p. 412.

The following is the reference for the designation of *Bombyx certhia* Fabricius, 1793 as the type species of the nominal genus *Brahmaea* Walker, 1855:

Hampson, G.F. [1893]. *The fauna of British India, including Ceylon and Burma, moths*, vol. 1, p. 29.

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INSTRUCTIONS TO AUTHORS

The following notes are primarily for those preparing applications to the Commission; other authors should comply with the relevant sections. Applications should be prepared in the format of recent parts of the Bulletin; the Commission's Secretariat reserves the right to return applications not so prepared.

Text. Typed in double spacing, this should consist of numbered paragraphs setting out the details of the case and leading to a final paragraph of formal proposals. Text references should give dates and page numbers in parentheses, e.g. 'Daudin (1800, p. 39) described ...'. The Abstract will be prepared by the Secretariat.

References. These should be given for all authors cited. The title of periodicals should be in full and be underlined; numbers of volumes, parts, etc. should be in arabic figures, separated by a colon from page numbers. Book titles should be underlined and followed by the number of pages, the publisher and place of publication.

Submission of Application. Two copies should be sent to: The Executive Secretary, the International Commission on Zoological Nomenclature, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. It would help to reduce the time that it takes to process the large number of applications received if the typescript could be accompanied by a disk with copy in ASCII text in IBM PC format. It would also be helpful if applications were accompanied by photocopies of relevant pages of the main references where this is possible.

Applicants would be well advised to discuss their cases with other workers in the same field before submitting applications, so that they are aware of any wider implications and the likely reactions of other zoologists.

PUBLICATION DATES AND PAGINATION OF THE PRESENT VOLUME

<i>Part No.</i>	<i>Pages in Part</i>	<i>Date of publication</i>
1	1-100	26 March 1992
2	101-180	25 June 1992
3	181-252	30 September 1992
4	253-308	17 December 1992

INSTRUCTIONS TO BINDER

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